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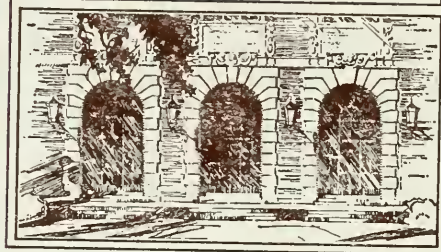
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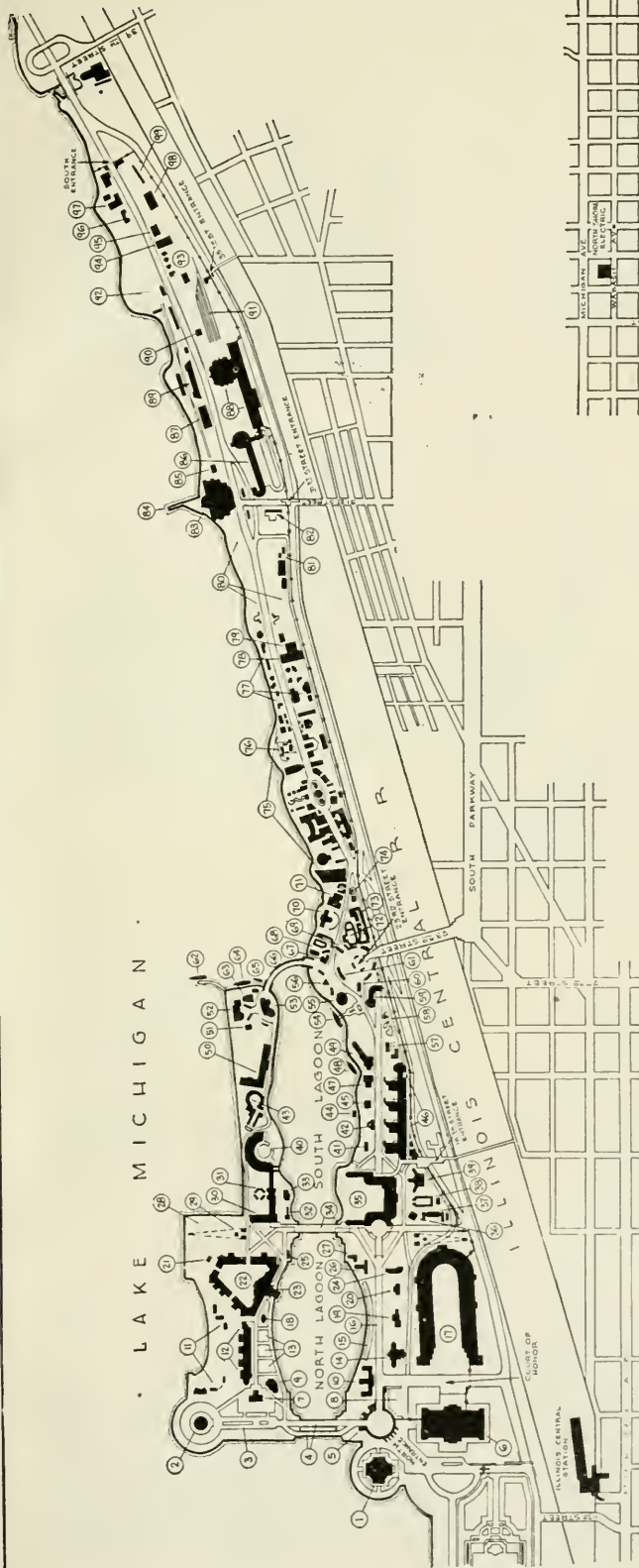
**KRAFT**  
**Mayonnaise**  
*Kitchen-Fresh*

KRAFT PHENIX



### VISIT THE KRAFT "MAYONNAISE KITCHEN"

in the Agricultural Building, A Century of Progress Exposition, and see Kraft *Kitchen-Fresh* Mayonnaise being made! The Agricultural Building is indicated on the map opposite by the figure "12." The Kraft-Phenix Exhibit is in Booth 11, at the south end of the Agricultural Building.



**ALPHABETICAL KEY**

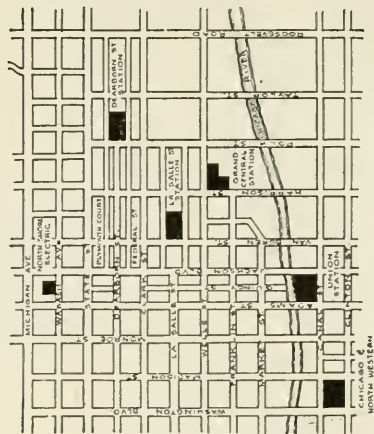
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• LOCATION OF RAILROAD STATIONS •



## ALPHABETICAL KEY (Continued From Page 1)

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Polish Pavilion.....	7	Terrazzo Promenade.....	34	Sky Ride.....	29	Receiving Depot.....	99	Sky Ride.....	29	U. S. Government Building.....	23
Poultry Show.....	93	31st Street Boat Landing.....	84	Social Agencies & Picnic Ground.....	28	Schlitz Garden Restaurant.....	25	Social Agencies & Picnic Ground.....	28	Waiting Corp. & Nash Motor Bldg.....	90
Press Building.....	39	Time & Fortune Building.....	41	Soldier Field.....	17	Science Bridge.....	34	Soldier Field.....	17	Walgreen's Store.....	60
		Travel & Transport Building.....	88	Spurs Theatre.....	63	Sears Roebuck Bldg.....	14	Spurs Theatre.....	63	The World A Million Years Ago.....	55
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Armco Ferro Enamel House	Masonite House	Adobe House	Fisher's Circus Cook House
Common Brick House	Moore House	African Digs	Foreign Bazaar
Crane Company Station	Owen-Ilinois Glass Block	Aligator Show	Fort Dearborn Massacre
Dahlia Society Gardens	Jas. W. Owen Nurseries	Battle of Gettysburg	Flying Turns
Florida Tropical Home	Rostone House	Bridge Keno	Laff In The Dark
General Houses, Inc.	W. E. J. Sloane Building	Carlson's Amusements	Lincoln Group
House of Tomorrow	Southern Cypress Building	Carter The Greca	Lion Drome
Johns-Manville Building	Stranstel House	Crown Food	Marquette Cabin
Kohler Pavilion	Victor Vienna Garden Cafe	Cyclone Coaster	Maynes Illinois Rules
Lumber House		Dance Ship	Midget Village
		Desaible Cabin	Mills Freak Show
		Dufour's Freak Show	Milne Character Reading
		Fascination	

## IN MIDWAY AREA (75)

Negro Plantation Show	Observation Balloon	Photo Shop	Ripley—Believe It Or Not
Oriental Village	Penland de la Guerre	Kutledge Tavern	Scouters Ride
Penland Weavers & Potter's Cabin		Shooting Gallery	Shufflette
		Snake Show	Whirl-O-Plane

## NUMERICAL KEY TO MAP LOCATIONS

1—Shedd Aquarium	27—Italian Restaurant	52—Hollywood	75—Midway
2—Adler Planetarium	28—Social Agencies & Picnic Grounds	53—Century of Progress Club	76—Fort Dearborn
3—Terrazzo Promenade	29—Sky Ride	53—Pabst Blue Ribbon Casino	77—Home & Industrial Arts Group
4—Planetarium Bridges	30—Hall of Social Science	54—Byrd's Ship	78—Home Planning Hall
5—Eitel's Rotisserie	31—Radio & Communications Building	55—The World A Million Years Ago	79—Gas Industry Hall
6—Field Museum	32—Columbus Memorial Light	56—Havoline Thermometer	80—U. S. Army Camp
7—Polish Pavilion	33—Edison Memorial	57—American Radiator & Stand. Sani-tary	81—Indian Village
8—Rapid Transit Terminal	34—Science Bridge	58—Sinclair Prehistoric Exhibit	82—Maya Temple
9—Dairy Building	35—Hall of Science	59—Firestone Building	83—General Motors Building
10—Administration Building	36—Bendix Lama Temple	60—Walgreen's Store	84—31st Street Boat Landing
11—Jantzen's Beach	37—Japanese Pavilion	61—The Hub—Henry C. Lytton & Sons	85—Palwaukee Airport
12—Agricultural Group	38—Chinese Pavilion	62—23rd Street Steamer Landing	86—Chrysler Building
13—Florida Gardens	39—Press Building	63—Spors Theatre	87—Air Show Inc.
14—Sears Roebuck Building	40—Electrical Building	64—Norwegian Ship	88—Travel & Transport Building
15—Grand Stand	41—Time & Fortune Building	65—Blue Nose	89—Pageant of Transportation
16—Avenue of Flags	42—Cactus Pergola	66—23rd Street Bridge	90—Waiting Corp. & Nash Motor Bldg.
17—Soldier Field	43—Enchanted Island	67—Infant Incubator	91—Outdoor Railway Trains
18—Miller High Life Fish Bar	44—Motor Boat Show	68—Streets of Paris	92—Goodyear Field
19—Illinois Host House	45—Christian Science Monitor	69—General Cigar Company	93—Poultry Show
20—Swedish Pavilion	46—General Exhibits Group	70—The A & P Carnival	94—Days of '49
21—Alaska Building	47—Muller Pabst Restaurant	71—Old Heidelberg Inn	95—Domestic Animal Show
22—States Building	48—Show Boat	72—Moroccan Village	96—Great Beyond
23—U. S. Government Building	49—Hall of Religion	73—Belgian Village	97—Ukrainian Pavilion
24—Czechoslovakian Pavilion	50—Horticultural Building	74—Alpine Garden	98—Greyhound Service Station
25—Schlitz Garden Restaurant	51—Egypt		99—Receiving Depot
26—Italian Pavilion			



# OFFICIAL GUIDE



## BOOK OF THE FAIR

1933



Published by

**A Century of Progress**

Administration Building

Chicago

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## Foreword

This is the official exposition guide-book of A Century of Progress, Chicago's 1933 World's Fair. It contains the latest and most accurate information available on what has been accomplished and what is planned for this Exposition of the greatest era of the world's scientific and industrial history.

*Rufus C. Dawes*  
*President.*



transportation facilities to and within the grounds, and the comforts and conveniences designed for your service. The Book endeavors to prepare your mind with authentic data and description of buildings and exhibits which, in a plan years ago conceived and faithfully followed, compose, you will discover, a harmonious whole—the engineered development of an epic theme.

It will serve you as a Fair guide and encyclopedia, and, too, it is hoped, as a souvenir that you will treasure.

## **What Is the Meaning of It All?**

Millions Are Expended—A Magic City Created—Throngs Come—  
The World Watches—Then It Vanishes—

### **WHY?**

From May 27 to November 1, 1933, the interest of a considerable part of the civilized world is focused upon 424 acres of land that lie along the shore of Lake Michigan, edging Chicago. A little while ago this site was placid lake. Now, shimmering beside the water, a dream city is risen. It lights the sky with splendor, yet soon will disappear and be merely a memory.

## **Five Short Months of Celebration**

The immensity of the enterprise might make you ask yourself, What could be so tremendously important that a city and its citizens should undertake this titan task of building, shoulder these infinite details, merely to invite the world to come for a carnival?

Leaf the pages of history for the last 100 years. The answer is there.

## **A City Lifted From Mud**

Only a hundred years ago Chicago was a huddle of huts, hewn of logs, clinging to the shadows of Fort Dearborn for safety from the Indians, and four years after its incorporation as a village, in 1833, its population, conquering patches of dreary swamp, had reached 4,000. Today it is nearly 4,000,000—3,376,438 for the sake of accuracy, by the census of 1930—and growing at a rate of 70,000 a year.

Chicago in a century has climbed to her place as second largest city in America, fourth in the world.

One thousand two hundred houses of worship pierce her skies with spires—more churches and missions than in any of thirteen of the states—and she is one of the country's great religious centers. She has 6,000 acres given to parks and supervised places of play and 35,000 acres of picnic and playgrounds, as forest preserves outside the city limits, and supports a hundred or more supervised social centers.

Chicago has close to 6,000 miles of streets, 84 miles of beautiful boulevards. Beneath her bustling loop, to which area daily at least 250,000 people come to work or for business, and a million and a quarter

more to shop or to visit, narrow-gage trains whisk merchandise over 60 miles of tracks through tunnels to stores and marts. Above its towering skyscrapers, passenger and pleasure aircraft and mail planes go their speedy ways, and Chicago rapidly is becoming the hub of American aviation.

Chicago is the greatest railroad center in the United States, 33 trunk lines terminating here. An average of one train every 58 seconds enters the city, year in and year out. It is the largest livestock market and packing center. It is one of the greatest grain markets and one of the most important ports. Where, a hundred years ago the trading in furs and the business of trapping them constituted the major part of the hamlet's commerce, today her 10,000 or more industries annually produce a vast variety of wares, whose wholesale value averages close to four billions of dollars.

It might well stir the most sluggish imagination to contemplate the fact that Chicago, born in the marshes, and actually raised, some years later, by human energy and skill some 12 or 14 feet out of the mud for a healthful and more solid site, now is the commercial and the cultural capital of a domain of more than 40,000,000 people, residing within a night's ride of the city—a population greater than that of Great Britain or France, equal to Germany's.

Chicago stands high in world notice as a medical center. It is the home of six famous libraries. Its Art Institute, which, by the way, located in the Grant Park area north of the Fair grounds, is one of two permanent institutions included in *A Century of Progress* proper, is visited by more than a million people annually. The Field Museum, which stands, a \$6,000,000 marble structure, at the right of the Fair grounds' North entrance, is rated as one of the world's finest museums of anthropology and ethnology. The Shedd Aquarium, within a stone's throw of the North entrance, houses a permanent exposition of marine life second to none in the world. Chicago has a \$20,000,000 home of grand opera. Her Symphony Orchestra, founded by Theodore Thomas, is considered one of the finest. Her Museum of Science and Industry, established by the late Julius Rosenwald, in one of the magnificent buildings of the World's Fair of '93, in Jackson Park, ranks with the world's great museums. The Adler Planetarium and Astronomical Museum, also included as a part of the exposition, is the only one of its kind in America, and only one other in the entire world has its equal in equipment. Chicago is a center of education for the Middle West, a city of many great colleges and universities, enrolling 40,000 students; she has some 40 high schools, and junior high schools, and more than 300 grade schools.

### So Chicago Celebrates

The foregoing tells scantily a few of the things that cause men to call Chicago great. Ride over her boulevards, view her serrated sky-

line from her twenty-six miles of lake front, visit her institutions, see Chicago in all her myriad phases of life and activity, and wonder ceases why Chicago, in pride, is stirred to celebrate her own Centennial.

This youngster of the New World had fought the wilderness and won, and had welcomed peoples of many bloods who came and helped to build.

Then came years, of recent memory, when the economic scheme of things seemed to go awry, and the steady march of progress appeared, to many, halted.

But, undaunted, Chicago turned its face toward the morning of a new day—just as—one is struck by the parallel—she had done in '93. She invited the world to observe with her the victories of a glorious past and the promise of a more glorious future.

Justification enough, you might agree, for Chicago to jubilate over her own birthday, so peculiarly eloquent of progress. But why the nations? A great conflict had blazed, and much of the world was ravaged and much still is lame with the wounds of war. It might have seemed, then, that progress had turned back, its lights dimmed, and the world, wallowing in the welter of the war's aftermath, in no mood for jubilee.

A Century of Progress intends to bring assurance that the steady march of progress has not, however, swerved aside, nor even been seriously retarded, that so-called "recessions" are temporary, like the cloud that, for the moment, obscures the sun. History holds the evidence that this is true.

## Lights Ahead

It is recalled as singularly significant that, in 1893, when Chicago invited the world to celebrate the landing of Columbus on the beach of a little island in the Bahamas 400 years before, there was financial panic and widespread unemployment. Since then, the world has known prosperity such as it never before imagined.

Chicago herself, at the time of that World's Fair, was still recovering from a great disaster. In 1871 consuming fire had swept the city rendering 100,000 people homeless, destroying one hundred and ninety millions of dollars in property, and taking the toll of 200 lives. But then, rebuilt, she welcomed the world with a manifestation of her faith in the future.

And the world came, to discover that the forces that spring from men's minds could not be checked for long, if checked at all. These are minds that are no more dismayed by a pause for readjustments than is the motorist who may halt beside the road to adjust his engine's carburetor. He does not believe his car irreparably ruined because of a minor flaw. He readjusts and goes on. And thus do the forces of progress sweep on. They are the forces of science, linked with the forces of industry.



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But when the plans were in the making for the exposition of 1933, the thought came that Chicago's Centennial celebration should be used to help the American people to understand themselves, and to make clear to the coming generation the forces which have built this nation.

One night, President Rufus C. Dawes sat at dinner with the late Michael Idvovsky Pupin, noted American scientist and inventor, and he

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And the story is made complete, its sequence a running narrative, by the exhibits of social science, which show you how Man has come up from the caves of half a hundred thousand years ago, adapting himself to, being molded by, his environments, responding to each new thing discovered and developed. You see man's march upward to the present day, where, in a home of 1933, he uses and enjoys all the multitudinous benefits with which science and industry have endowed him.

## Going Back a Century

Before you enter the Fair, it may serve to prepare your mind to keener appreciation of what our progress has been, if you simply shut your eyes and imagine yourself, for a moment, transported back a hundred years.

Now you are traveling as man had traveled before you for thousands of years, in a vehicle dragged by animals, for—in 1833—it has been only three years since America's first locomotive, prophetically named "Best Friend," chugged out of Charleston, S. C., over a few miles of track to Hamburg in the same state. So the "steam cars" are as yet only a fearsome experiment. You live roughly, in your own tiny, lonely world, hedged in by forest or houseless prairies or towering mountains. No means of quick communication have been contrived to overcome natural barriers or to break, for months at a time, the solitude. You wear crude dress, ill fashioned, for it is still the era when clothing chiefly is made by the women of the household—it is 13 years before the invention of the sewing machine that permitted the making of clothes in volume. You eat foods that must be indigenous to the territory in which you live, for the preservation and protection of foods has not yet been developed. You read slowly and perhaps painfully by tallow candle light, for electricity has not come to work its wonders, even the kerosene lamp is in the future. You fall ill, and primitive remedies are administered, or the crude knowledge of a restricted man of medicine is sought. You live in fear and danger of epidemics which sweep the community unchecked time and time again and take their deadly toll. Not even antiseptics for combating infection have come, and will not until 1867. Life is cruel and harsh.



The Hall of Science at Night



## Returning to the Present

Come back to 1933. You hurtle through the air over mountains and plains on motored wings, or speed along the ground in luxurious trains, or over smooth highways in motor-powered cars. You live in a home made of materials created by the genius of man anticipating the vanishing of forests. Electricity is your servant to give you light and do your work. You whisper and your words wing their way across the seas to be heard by listening ears. You read of an event happening a few hours before, thousands of miles away, and you see it pictured in the same newspaper. You dine on foods in their original freshness and flavor, but grown leagues distant, and choose your foods by the scales and charts of science for health and strength, and eat it in safety because science has protected it. You choose clothing of infinite variety of fabrics and patterns. You sit and watch the living likenesses of actors move about in their previously-enacted roles and you hear them speak. You turn a dial and take music and speeches from out of the air. You may fall ill, and medical science performs miracles with the new knowledge and new devices and instruments. Life in a hundred years, in all its phases and in multitudinous ways is more felicitous, and health safer a thousand times, than it ever has been since the world began.

## The Future

Thus you conjure up the intimate picture, that with most of us has become so commonplace, of what science and industry have done for us in the common, everyday activities of life. And perhaps are moved to ask, "What does the future hold?"

Let's go back only 40 years, when Chicago's other World's Fair was held. That Fair, historians say, awoke a nation of 65,000,000 people from a lethargic material-mindedness and turned its thought eagerly to cultural and spiritual striving. Its beautiful buildings were on classical lines. Within one ornate structure crowds milled and marveled, and whispered in awe. It contained exhibits that to some were a prophecy beyond the mind's conception; to others, perhaps, merely an amazing new kind of "trick" of doubtful value or practical promise.

"The Fair," wrote an observer, "considered as an electrical exposition only, would be well worth the attention of the world." An electrical engineer is quoted as saying, "You have everything here that was undreamed of 25 years ago. You have here the culmination of invention and science. You see here the acme of modern progress. It is worthwhile to note this carefully, because if we should have another exhibit twenty-five years from now, the probability is that not one of the things which seem so wonderful, will then be valued. They will have been superseded by inventions so much more useful, that it is barely within the compass of any man's mind to conceive of what the future has in store for us."

## Almost at Once It Happened

In less than three years thereafter three great discoveries were given to the world that completely revolutionized the whole of science!

These discoveries served to change the atomic theory with which men of science had been groping their way. They set science on the road that it travels today. Two years after the World's Fair, Wilhelm Konrad Roentgen in Germany discovered X-Rays. A year later Antoine Henry Becquerel in France found the radioactivity of uranium, and paved the way for the discovery of radium. The next year, Joseph John Thompson in England discovered electrons by studying the nature of rays produced by electrical discharges in vacuum tubes.

So familiar to us all are the commoner uses of the X-Ray, and of radium, and of the vacuum tube used in our radios, that it requires no scientific or technical knowledge to instantly grasp the applied importance of those discoveries. But in theoretical science—in the laboratory of the research worker—the implications of these discoveries were epoch-making. Since they were made, science has gone faster along the road toward the steady conquest of the invisible forces that rule the universe. It has succeeded in putting many new and basic devices into harness for mankind.

So fast has been that progress, in fact, that today, as you look upon the wonders of science, you wonder whether tomorrow may not hold achievements that will again completely revolutionize our methods of living.

You will see also at the fair countless exhibits showing where science spans the gap between laboratory and factory. Among the dynamic displays, for example, you will observe the complete process of obtaining gasoline, its distillation, cracking, refining. At the same time you will see the results of the latest research into cosmic rays that may prove—science itself will not say with certainty—the source of new power that can be taken from space. You will see, too, how sound is carried on a beam of light. Will this, in the near future, become a new means of communication? You can be the judge.

## Returning to the Present

Come back to 1933. You hurtle through the air over mountains and plains on motored wings, or speed along the ground in luxurious trains, or over smooth highways in motor-powered cars. You live in a home made of materials created by the genius of man anticipating the vanishing of forests. Electricity is your servant to give you light and do your work. You whisper and your words wing their way across the seas to be heard by listening ears. You read of an event happening a few hours before, thousands of miles away, and you see it pictured in the same newspaper. You dine on foods in their original freshness and flavor, but grown leagues distant, and choose your foods by the scales and charts of science for health and strength, and eat it in safety because science has protected it. You choose clothing of infinite variety of fabrics and patterns. You sit and watch the living likenesses of actors move about in their previously-enacted roles and you hear them speak. You turn a dial and take music and speeches from out of the air. You may fall ill, and medical science performs miracles with the new knowledge and new devices and instruments. Life in a hundred years, in all its phases and in multitudinous ways is more felicitous, and health safer a thousand times, than it ever has been since the world began.

## The Future

Thus you conjure up the intimate picture, that with most of us has become so commonplace, of what science and industry have done for us in the common, everyday activities of life. And perhaps are moved to ask, "What does the future hold?"

Let's go back only 40 years, when Chicago's other World's Fair was held. That Fair, historians say, awoke a nation of 65,000,000 people from a lethargic material-mindedness and turned its thought eagerly to cultural and spiritual striving. Its beautiful buildings were on classical lines. Within one ornate structure crowds milled and marveled, and whispered in awe. It contained exhibits that to some were a prophecy beyond the mind's conception; to others, perhaps, merely an amazing new kind of "trick" of doubtful value or practical promise.

"The Fair," wrote an observer, "considered as an electrical exposition only, would be well worth the attention of the world." An electrical engineer is quoted as saying, "You have everything here that was undreamed of 25 years ago. You have here the culmination of invention and science. You see here the acme of modern progress. It is worthwhile to note this carefully, because if we should have another exhibit twenty-five years from now, the probability is that not one of the things which seem so wonderful, will then be valued. They will have been superseded by inventions so much more useful, that it is barely within the compass of any man's mind to conceive of what the future has in store for us."



## Almost at Once It Happened

In less than three years thereafter three great discoveries were given to the world that completely revolutionized the whole of science!

These discoveries served to change the atomic theory with which men of science had been groping their way. They set science on the road that it travels today. Two years after the World's Fair, Wilhelm Konrad Roentgen in Germany discovered X-Rays. A year later Antoine Henry Becquerel in France found the radioactivity of uranium, and paved the way for the discovery of radium. The next year, Joseph John Thompson in England discovered electrons by studying the nature of rays produced by electrical discharges in vacuum tubes.

So familiar to us all are the commoner uses of the X-Ray, and of radium, and of the vacuum tube used in our radios, that it requires no scientific or technical knowledge to instantly grasp the applied importance of those discoveries. But in theoretical science—in the laboratory of the research worker—the implications of these discoveries were epoch-making. Since they were made, science has gone faster along the road toward the steady conquest of the invisible forces that rule the universe. It has succeeded in putting many new and basic devices into harness for mankind.

So fast has been that progress, in fact, that today, as you look upon the wonders of science, you wonder whether tomorrow may not hold achievements that will again completely revolutionize our methods of living.

You will see also at the fair countless exhibits showing where science spans the gap between laboratory and factory. Among the dynamic displays, for example, you will observe the complete process of obtaining gasoline, its distillation, cracking, refining. At the same time you will see the results of the latest research into cosmic rays that may prove—science itself will not say with certainty—the source of new power that can be taken from space. You will see, too, how sound is carried on a beam of light. Will this, in the near future, become a new means of communication? You can be the judge.

## **A Brief History Of A Century of Progress**

The idea of a giant celebration by Chicago on its centennial was urgently supported by Myron E. Adams before Mayor William E. Dever, who on August 17, 1923, having been duly authorized by the City Council, appointed a committee of citizens to lay the foundations for the celebration. The chairman of this committee was Edwin N. Hurley, who gathered much valuable information, considered various plans, and had prepared a report of the greatest value to its successors.

Upon the election of William Hale Thompson, Mr. Hurley, on behalf of this committee submitted this report of its activities and recommendations, and at the same time submitted the resignations of the committee's members. These resignations were accepted and the matter was, for the time being, dropped.

Late in 1927, a small group of citizens headed by Charles S. Peterson, then City Treasurer, urged upon Mayor Thompson the reconsideration of the project, submitting to him convincing evidence of a great popular interest and support. Accordingly, after appropriate action by the City Council, Mayor Thompson called a public meeting of citizens to consider the proposal of having an international exposition to celebrate Chicago's hundredth birthday.

At this meeting held December 13, 1927, it was determined that the exposition should be announced and a corporation, not for profit, organized for the purpose of preparing for it. The first officers of this association to be elected were: President, Rufus C. Dawes; Vice-President, Charles S. Peterson; Secretary, D. H. Burnham; Treasurer, George Woodruff; Comptroller, Arthur Andersen.

Things started to hum. Here was a job that called for men and women of vision, of civic spirit, of self-sacrificing mold, and the field must be canvassed and the workers chosen. The list of those men and women who have given so freely of their time, loyalty, and resources, has increased in number as the Exposition grew, while the project itself has been singularly free from inharmonious bickerings within and popular attacks from without.

### **The Fair Gets Under Way**

On the fifth day of January, 1928, A Century of Progress was organized as an Illinois corporation, not for pecuniary profit, having as its charter purpose, "the holding of a World's Fair in Chicago in the year 1933." The original name of the corporation, "Chicago Second



Avenue of Flags

World's Fair Centennial Celebration," was changed only July 9, 1929, to "A Century of Progress."

No profit can, under any circumstances, accrue to members of the World's Fair Association. If any funds remain after payment of the outstanding bonds, they are to be given to existing organizations whose spirit and work is consonant with the basic theme of A Century of Progress.

The international character of the Exposition is indicated by the fact that on February 5, 1929, a joint resolution of Congress was approved authorizing the President, on assurance that five million dollars had been raised by the Corporation, to invite the nations of the world to participate in the Exposition. This assurance having been given to the President the invitation was sent through our diplomatic officers to all nations on January 10, 1930.

An enabling act of the Illinois legislature permitted the Exposition to be held on new-made state park land lying along Lake Michigan, opposite the heart of the city. In carrying out the aims of this Act, A Century of Progress has had the continuous and unwavering support of the South Park Commission, under whose jurisdiction this land lies. The Commissioners are Edward J. Kelly, Chairman, now Mayor of Chicago; Benjamin F. Lindheimer, Michael L. Igoe and Philip S. Graver.

### Without Cost to the Taxpayer

In financing—as in creating, as in color, as in architecture—A Century of Progress has planned boldly, executed audaciously and looked always into the future. That is the theme of the Fair—*achievement*, and its *promise*. It breathes of the spirit which has made Chicago, and which summons the World to partake of new hope and encouragement.

Here in the making, through years of financial crisis, was a several million dollar public enterprise going forward steadily, step by step, along lines not experienced in the history of our national expositions. In these days when articulate protest of peoples of the world has risen against further taxation, A Century of Progress was completed without one cent of taxation being imposed upon an already heavily burdened citizenry. No Federal government, state, county or city subsidy was asked for, or received.

Other world expositions have greatly depended upon subsidies. Such moneys have constituted the major part of their funds. The World's Fair in Chicago in 1893 received \$5,000,000 from the City of Chicago, \$2,446,680.43 from the Federal government. The Louisiana Purchase Exposition in St. Louis in 1904 received \$5,000,000 from the City of St. Louis and \$5,000,000 from the Federal government, and a loan from the Federal government of \$4,600,000. The Panama Pacific Exposition, held in San Francisco in 1915, received from the City of San Francisco the sum of \$5,000,000, from the State of California, \$4,900,000, and from various counties of the state \$556,341. The Federal government did not, however, contribute.



Early needs were met from the fees of founder and sustaining members of the corporation—\$1,000 each for the former and \$50.00 each for the latter.

The citizens of Chicago, as an expression of their faith in the enterprise, formed the World's Fair Legion. More than a hundred thousand paid the \$5.00 membership fee, the total of which was set aside with a trustee for return to the members if the Fair never opened or to purchase them admission tickets when it opened.

The basis of financing was an issue of gold notes of ten million dollars. These notes are secured by the deposit of forty per cent of the gate receipts in the hands of the trustees and are guaranteed by the endorsement of prominent citizens of Chicago. In a short campaign of three days, while on a flying visit to America from his duties as United States Ambassador to the Court of St. James, General C. G. Dawes secured these guarantees of over \$12,000,000, thus enabling the gold note issue to be made. More than fifty per cent of these notes were sold to the guarantors themselves during the summer of 1929 and in spite of the depression that followed the subscriptions that were made at that time were practically all faithfully performed during 1930 and 1931. Subsequently corporations and individuals have taken these notes in payment for services and materials and no sales of these gold notes have been made for any sum at less than par.

Plans were made, the Fair started. No contract was let unless there were means with which to pay for it. Yet work never ceased, more buildings were erected, more exhibits were installed, more features contrived to make A Century of Progress a gorgeous, living spectacle that its participants will remember to their dying days, than were contained in the original schedule.

No buildings were erected on any general theory that, "maybe and perhaps," exhibits would be found that, in rental for space, would pay for them. Fair officials determined that insofar as the Exposition was an expression of Chicago's pride and energy, just that far the citizens themselves should prepare and set the stage; that insofar as the celebration met the needs of industry, just so far would industry present the drama.



**Lenox R. Lohr, General Manager,  
A Century of Progress**



## The Symbol of Arcturus

Perhaps nothing so graphically symbolizes the swiftness with which science has moved, or presents so clear-cut a picture, as the way that the World's Fair of 1893 was opened, compared with the opening of A Century of Progress. In '93, men marveled that President Grover Cleveland could press a button and start a fountain flowing, and wheels turning as the official Fair opening. At that moment, 40 years ago, the orange star Arcturus, commonly called Job's star, blinked down upon the Fair. Light that left it then has since been racing at a speed of 186,284 miles a second earthward. The idea was conceived of opening A Century of Progress with the rays of Arcturus. A simple matter now for science to catch this feeble beam when it arrived on earth, and as it struck the great telescope of Yerkes Observatory in Wisconsin, transform it into electric energy by means of a photoelectric cell, amplify it by the methods of radio and speed it on to Chicago to start the big show's night life.

A miracle, they would have said a hundred or even forty years ago. But today, the "electric eye," relays, vacuum tubes, amplifiers, microphones, which respond to the tiniest fluxes of energy, help to do the work of the world in almost routine manner.

### *Progress!*

And as you roam the vast buildings, ride through the grounds, visit the places where fun is supreme, you will find that all within this great World's Fair is a definite part, a paragraph or chapter in the story of progress and advancement.

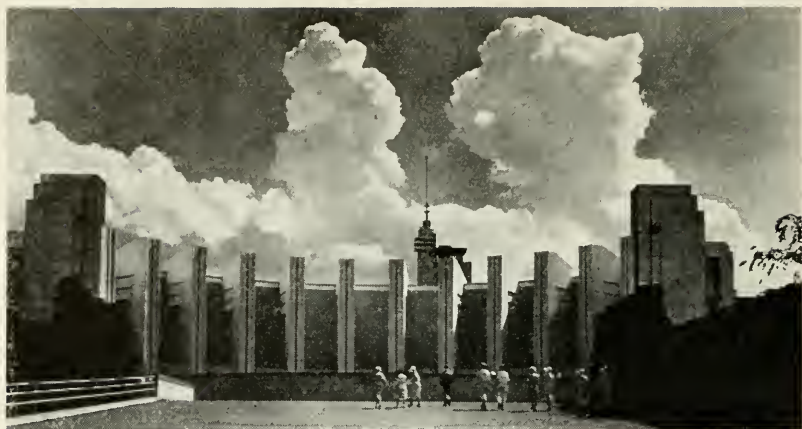
## In Speech of Color

Bold splashes of color seem almost articulate with the spirit of carnival, a flaming expression of fun and frivolity which, after all is said and done, is of the very essence of a Fair. Joseph Urban, famous architect and stage designer, sought to achieve a harmony of color on building exteriors that might also express the Exposition's deeper, more lasting implications and purposes. He has used on the buildings 24 colors—one green, two blue greens, six blues, two yellows, three reds, four oranges, two greys, white, black, silver, and gold. And it is interesting to note the percentages of colors used. Approximately twenty per cent of all the painted surfaces is in white, twenty per cent in blue, twenty per cent in oranges, fifteen per cent in black, and the remaining twenty-five per cent is divided among the yellows, red, greys, and green.

In terms of laboratory experiment, the result sought was a correlation of many buildings that are different in character, shape and mass, and which are arranged on a very informal plan. Too, the achievement



Throngs Fill the Court of Honor, Hall of Science



**The North Entrance to the Hall of Science**

of brightness and life for materials that of themselves are not beautiful. Were one to pose as a prophet, he might well say that here is suggestion of a future American color harmony, distinctive, bold, that could change neutral sections of cities and towns, bring cheer and liveliness to workers in factories, perhaps revolutionize in time the conception of color effects in homes. At any rate, here, color is decorative in a practical way, a planned conception to fit the architectural scheme of utilitarian modernity, and to play a part in a joyous festival.

### **In Style of Buildings**

Consider the architecture of the buildings. Wonder, perhaps, that in most of them there are no windows. Note curiously that these structures are for the most part unbroken planes and surfaces of asbestos and gypsum board and plywoods and other such materials on light steel frames, rather than a parade of sculptured ornamentation.

"It would be incongruous to house exhibits showing man's progress in the past century in a Greek temple of the age of Pericles, or a Roman villa of the time of Hadrian," said members of the architectural commission of the Exposition, all of whom are graduates of the École de Beaux Arts, home of the classical school. "We are trying to show the world not what has happened in the past, because that has already been effectively done, but what is being done in the present, and what may happen in the future."

### **Modern Planning**

A Century of Progress considered two things in planning the types of building construction you see here. First, here was a city to be built staunchly for 150 days of life, not for the 30 years that is the anticipated life of a modern building. Why, then, build for three decades, which would be in direct contradiction to the new science of

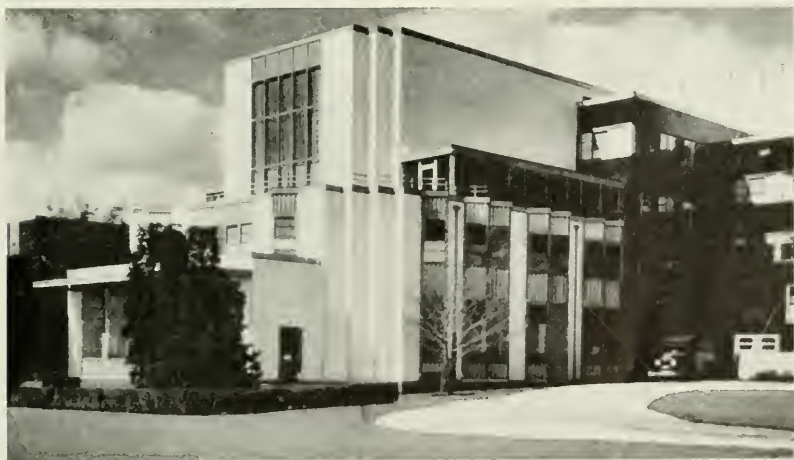
business that decries waste and extravagance, when the genius of man has provided factory-made parts, wall materials pre-fabricated in shops, steel frames and clips and screws for quick assembly, and new compositions, all to permit the building of staunch structures, which yet can be quickly razed, and the materials salvaged? And why, architects now ask themselves, should Greek pillars be used when they no longer are needed, as the Greeks used them, to be actual supports, or fanciful ornamentations or projections be clapped onto surfaces when the practical reasons which caused their use originally no longer exist?

Second, in construction as well as in architecture, it was intended that here should be a huge experimental laboratory, in which home builders and manufacturers can study, and from which they might borrow for their buildings of the future. Windowless, these buildings assure, by virtue of the advancement in the science of interior lighting, that on no day of the Fair, no matter how dark and gloomy, can visitors be deprived of the full measure of beauty in interiors and exhibits. At the same time, they may point the way for many new departures in economical construction. They exemplify, too, the advancement which has been made in healthful, controlled, filtered ventilation. Architects and exhibitors have constant control over both light and ventilation regardless of the kind or time of day.

### **The Fair's First Experiment**

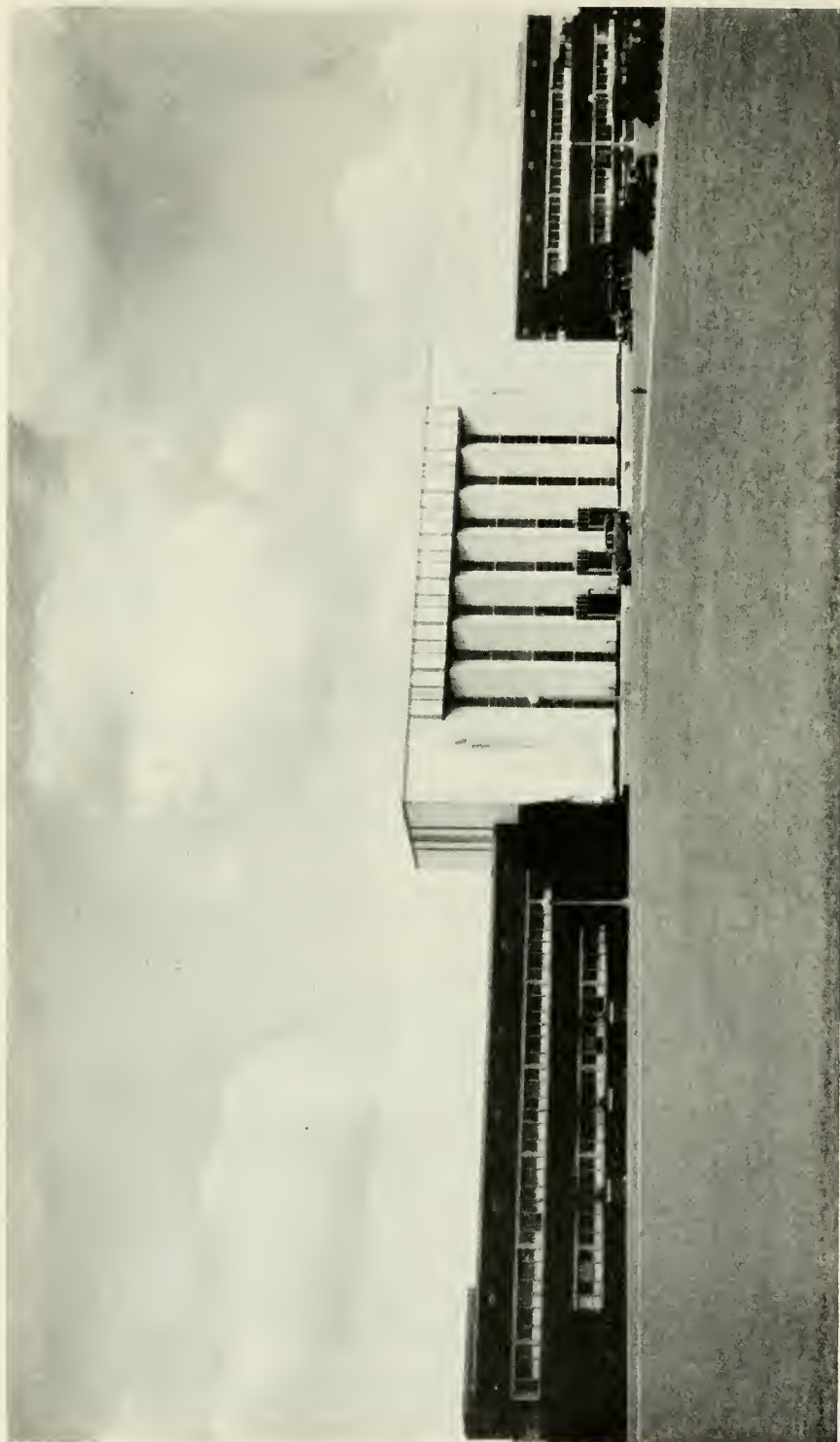
The Administration building, headquarters of the Exposition, can be said to strike the keynote of the entire architectural plan. Ultra-modern in design, it was here that far-reaching experiments were made in unusual lighting and color effects, and in choice of construction plans and materials.

The Administration building stands to the left after you enter the North Entrance, an E-shaped structure clothed in ultra-marine blue,



**Administration Building—East Front**





Administration Building—West Front



and yellow, with an entrance of silver, and it occupies an area of 67,000 square feet. The architects were Holabird & Root, and Hubert Burnham, and Edward H. Bennett.

Stand before it, and two heroic figures symbolizing the theme of the Fair — science and industry — greet your eyes, dominating the entrance. These figures were modeled in plaster by Alvin Meyer. Science is symbolized by the wheel of the zodiac at its base, and industry, by wheels and gears.

Enter the main entrance hall. Here is a vast room, containing the world's largest photo-mural, a view of the Exposition.

A broad door opposite the entrance gives access to a corridor connecting the wings of the building and a wide stairway leading up to the foyer of the trustee's room. The trustee's room is famous for its modern simplicity. A high window at one end of the room commands a view of the Lagoon, Northerly island and Lake Michigan. Doors open out onto balconies on three sides of the room. On each side of a wide purple band, the ceiling and the walls are covered with flexwood, a veneer made from Australian lacewood mounted on cloth and applied like wall paper. The mural decorations are of imported inlaid veneers in the original colors of the various woods used.

A long, wedge-shaped table, unique and utilitarian, occupies the center of the room. Its tapering design enables each guest easily to see all others at the table.

The portions of the E-shaped building devoted to offices and work-rooms are arranged for the most efficient utilization of light and ventilation. The building is an experiment indicating possible trends in office and factory construction. Its low cost per cubic foot, the high salvage value of its materials, and its easy adaptation to everyday work, offering an army of employees few steps to climb with no need for elevators, and giving the various offices convenient access to one another, suggest many possibilities for similar structures in the future. The roof insulation is of processed cornstalks. Asbestos cement board covers the outside walls. The inner sheathing is of plaster board. Into the two and three-quarter-inch space between the outer and inner walls, an insulating material of asphalt and wood was shot by pneumatic guns. The insulation provided by these materials is said to be equal to a 13-inch brick wall. These materials lend themselves to mass production, therefore, greater economy, and this, together with the ease of construction cut usual building costs to less than half!

### In Marvels of Lighting

Should you gasp with amazement as, with the coming of night, millions of lights flash skyward a symphony of illumination, reflect again that it is *progress* speaking with exultant voice of up-to-the-second advancement.

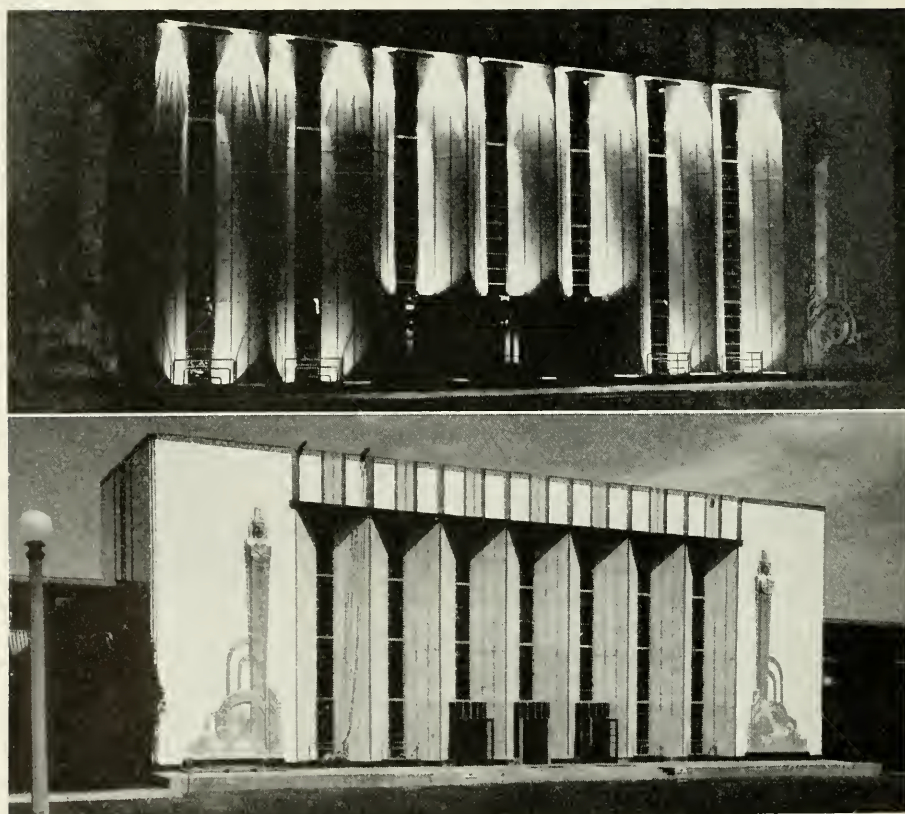
Nobody knows how many thousands of years ago, this spot that now blazes with light, was a part of vast stretches of ice. Glaciers

moved sluggishly against the cold sky, and sun and moon and stars were the only illumination. Centuries rolled by and man discovered fire and used it to warm his wigwams, caves, and huts. Oils from animals came into use for lighting, then came kerosene; today we have electricity.

And science has achieved a brilliance and skill of electric lighting which, as exemplified in the buildings of the Fair, render windows and skylights no longer a necessity in buildings; athletic fields can at night be made as bright as day for all manner of sports; and industries profit by billions through speeded-up production, and in safety, and savings in materials that once were spoiled because of insufficient light to permit workers to see clearly. In schools and homes and factories and offices advances in methods of lighting protect and preserve the human sight, and light hygiene, ray therapy and food irradiation bring renewed health and vigor to people everywhere.

### The Miracle of Light

A Century of Progress portrays vividly the story of Light in manifold ways. World science waits breathlessly the third exploration of the



Administration Building by Night and by Day

stratosphere by Professor Auguste Piccard and his brother Jean. They will soar 10 miles or more above Soldier Field in an aluminum ball similar to one on display in the Hall of Science. Who knows that they will not capture some cosmic rays which will further advance the knowledge

of men. They believe it possible. Crowds can study, with Professor William Beebe, whose bathysphere is on display, and in which he descended 2,200 feet into the sea, the light that illumines the myriad life of ocean beds. They can study infra-red, ultra-violet and various other energy rays, and perhaps catch that sense of eager expectancy with which Science waits, likely upon the threshold of a new era of miracles.

It is with like feeling that illuminating engineers say they look forward to illuminant development following this Exposition. "Expositions always have been milestones in lighting progress."



**The Hall of Science Tower by Night**

The chairman of the committee of Westinghouse and General Electric, engineers that designed a part of the lighting plans of the Fair, says: "The Exposition of 1933 not only will recall the advances during the last 100 years, but will give us glimpses of new developments and refinements that will be commonplace in a few years."

Within the buildings are borrowings from the future in inverted lighting, shaded arrangements, color effects, and without, a fairy-land of lighting effect on greater scale and in more numerous arrangements than the world has ever seen. Back in 1893, the World Fair was illuminated with 93,000 incandescent lights, supplemented

by 5,000 arc lights, in horse power representing three times the total electric horse power then used in the entire city of Chicago. Many thousands of visitors had never seen an incandescent light. The incandescent bulb then was faint in glow, and men knew little how to use it, yet varied

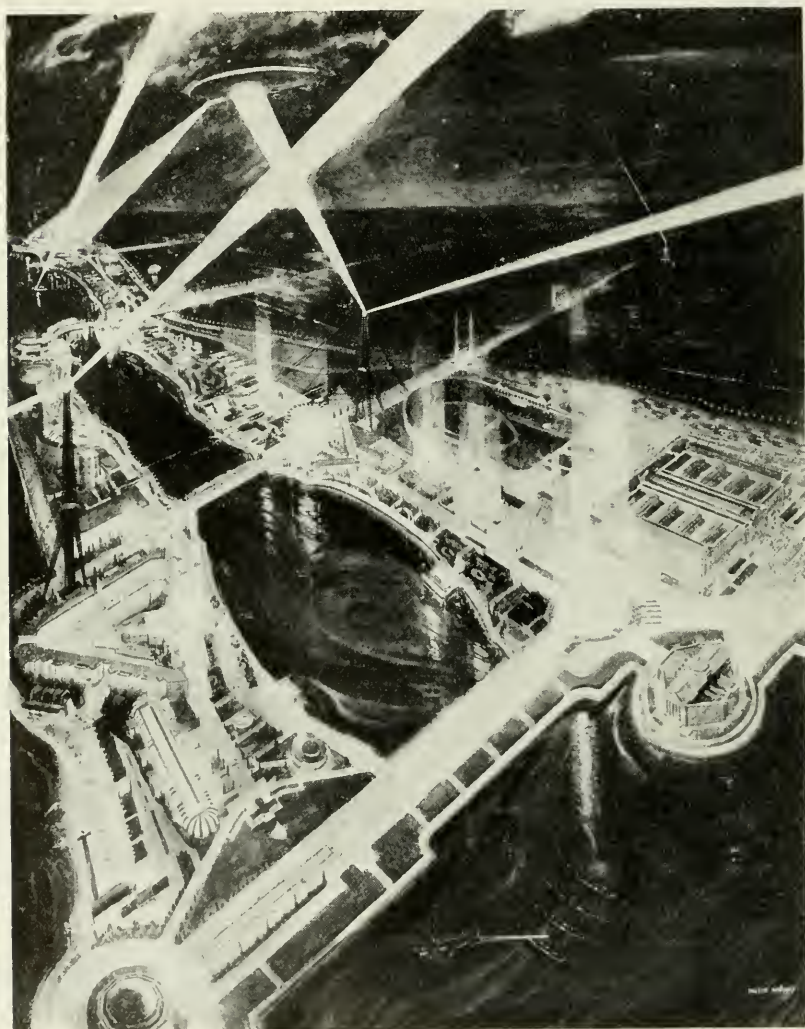


**The Hall of Science Tower by Day**



arrangements and effects were achieved that caused comment throughout the civilized world, and are credited with having been responsible for immediately beginning an era of illuminating progress. Two years after the Fair, the study of light and its practical application was placed on a scientific basis, instruments were designed to measure the intensity, quality and distribution of the light flux, and the physical characteristics of the light sources themselves for the first time studied.

Today, A Century of Progress is lighted also by incandescent bulbs, 15,000 of them for exterior illumination, and it is not even possible to guess the number within the Exposition buildings and concessions. They range from 10-watt to 3,000-watt power, creating a brilliancy of light that, compared with what was possible in '93 is as the sun to



A Century of Progress at Night (From painting by Walter E. Olsen)

morning's twilight. Arc lights, too, are used, vastly improved over those of 40 years ago. One battery of arc lights alone, 24 powerful search lights at the South end of the Fair grounds, has a light output of 1,920,000,000 candle power!

It is anticipated that the total current consumption for the period of the Fair will reach 18 million kilowatt-hours.

Scientifically controlled clear light predominates for the outdoor lighting, its effect on the brilliant color of the buildings achieving its beauty, while colored lighting is used for special displays, fountains and simulations of cascading water falls, or brilliant skies at sunset, or varied interesting patterns that illuminating science now finds possible and profusely indoors.

### Colored Light in Tubes

A new kind of illumination has come, and in the Century of Progress it is used in greater profusion than ever the world has seen. When President Dawes of the Exposition threw the switch on June 12, 1932, that first lighted the Hall of Science, the largest amount of gaseous tubes ever used on any one surface sprang to life. As you mingle with the throngs at night, you stand in the greatest flood of colored light that any equal area, or any city of the world has ever produced.

This color lighting is that of rare-gas tubes. You see it in blue, green, and yellow in countless signs and on billboards in letters and varied designs on your streets at home, in cities and towns and villages. This new light is produced by introducing rare-gas into a tube from which the air has been pumped, and the tube sealed, then a current of high-voltage electricity is passed through. The color radiated from the tube is determined by the element the tube contains and by the color of the tube; the red by neon in clear tube, the blue by mercury in a clear tube, yellow by helium in a yellow tube, and green by mercury in a yellow tube. True to the Fair's purpose of presenting achievements, and showing their *how*, you can go to the Electric Building and watch these gaseous tubes being charged, and bent into the shapes required.

From fireless night to the greatest display of light humans have ever seen is the span of progress A Century of Progress depicts for its visitors and men who remember the feeble light of the coal oil lamp, or who have sat beside the flickering candle flame, may gaze and exclaim that here is illumination at its apex. But science marches on. Here, perhaps, is only a hint of what the future may produce.



## The Basic Sciences

We shall suppose that the visitor has acquainted himself, in a general way, with the location of the park in which the Century of Progress Exposition has been built. This is a highly interesting bit of land, a space of four hundred and twenty-four acres, rescued from the lake since the Columbian Exposition of 1893. We shall suppose further that the visitor is entering the grounds at the northern gate, just east of the Field Museum, and that he walks south along that portion of Leif Ericson drive which is now known as the Avenue of Flags. This brings him, in about five or ten minutes, to the Hall of Science, a beautiful structure designed by Paul Cret of Philadelphia.

Here are housed the exhibits which illustrate the things that men are now thinking about in the various branches of learning known as the pure sciences.

Mr. Cret's problem was to build a structure which would lie directly across the Leif Ericson drive and extend down to the edge of the water in the lagoon. This problem he solved by making the northern front a graceful circular arc of high pylons extending a welcome to each approaching visitor. The rest of the building is in the shape of a U with the arms of the U extending to the water's edge and enclosing a court of three acres. The building itself covers an area of more than eight acres; something like 400,000 square feet.

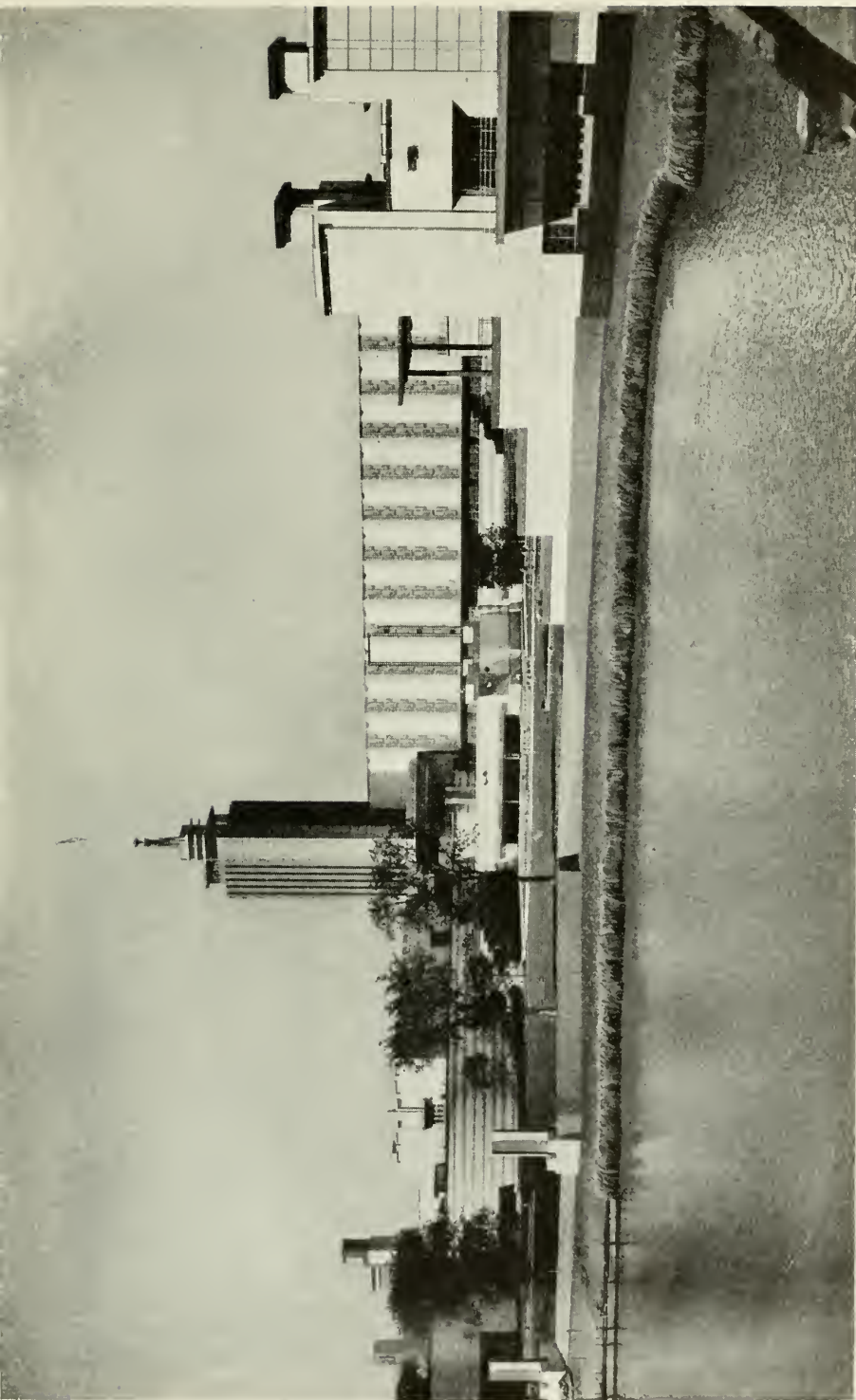
Two floors are used for exhibiting the basic sciences which, for convenience of operation, are grouped under the following seven heads: mathematics, astronomy, physics, chemistry, biology, geology and medicine.

The ground floor, which is on the same level with the surrounding park, is devoted to medicine and industrial applications of science.

The main floor, which is approached by a gentle ramp from the north, also by a viaduct from the industrial buildings on the south, is given over entirely to the basic sciences with the exception of medicine and astronomy. Since, however, astronomy is so splendidly represented in the Adler Planetarium, under the direction of Professor Philip Fox, the main floor of the Hall of Science is devoted to the remaining six of the basic sciences.

### Mathematics, "Queen of the Sciences"

Let us suppose that the visitor enters from the circular terrace, on the north side of the building, through the center of the pylons. He emerges into an octagonal room where he is at once confronted by an illustrated story of mathematics through the ages. The tale is told by



The Court of Honor of the Hall of Science

means of four projection lanterns, one for each of the four great fields into which modern mathematics is divided. Turning to the right and walking west, one meets various other mathematical demonstrations which have been prepared under the direction of Captain F. H. Roberts, U.S.N., and Major C. L. Fordney, U.S.M.C., who have had charge of the section of mathematics from the beginning. The visitor here will be well repaid by an examination of the beautiful and accurate surfaces of Mr. C. E. Johansson and the exquisite models of Dr. Saul Pollock. He will here have an opportunity to see how trigonometry is used in navigation and how various other branches of mathematics are employed in our daily work.

Celestial navigation is illustrated by an ingenious animated exhibit which will also show fundamentals of "piloting" or navigation in sight of land or lights.

The velocity of light is a quantity which is of major importance. The work of Professor Michelson in determining this value is well known. In his calculations a machine called "Michelson's Harmonic Analyzer" was used. This historic mathematical instrument is on display in the mathematical section.

The Galton Quincunx is the imposing title given to one exhibit in which probability curves are formed by ball bearings deviated in their fall by steel pegs in "penny slot machine" fashion. Another exhibit is one in which the probability of a rod falling on any one of a group of parallel lines is used to determine experimentally the value of that oft encountered quantity given in the elementary school texts as 3.1416, the universal symbol of which is the Greek letter *pi*.

"The Sieve of Eratosthenes" is the classical name given to a device which utilizes a beam of light and a photoelectric cell to determine the prime factors of numbers. Struggles with elementary arithmetic will be recalled with a sigh as the visitor marvels at the rapidity with which Dr. D. N. Lehmer's machine takes numbers apart.

Professor Theodore Soller of Amherst College has loaned to the mathematical section his machine for the composition of Simple Harmonic Motions. The beautiful curves may be made by the visitor himself. The "heterodyne" of radio is one of the interesting curves produced.

A magic square, which will print on a slip of paper a number which one has in mind, is a feature of "Mathematical Recreations." A happy family of ellipses (though their foci be apart) is another animated exhibit. The dairy farmer who has wondered, while turning the crank of his "separator," over what was going on inside the machine will be able to see centripetal force "on the job." The gyroscopic action of atoms is shown by the magnetization of an iron rod when rotated rapidly.

On the main floor is a modern gyroscopic compass in operation. One "repeater" which indicates the direction given by the main "gyro" is installed on the Balcony of the Great Hall and another is in the

mathematical booths. The "control" board with its motor generator is installed on the balcony.

Exhibits showing how correct time is obtained and transmitted, loaned by the U. S. Naval Observatory, may be seen on the balcony. A companion exhibit prepared by the Navy shows the "Developmental History of Radio Communication." One hundred and forty-one years of mathematical development from D'Alembert's equation of wave motion in 1747 to the beginning of the experimental stage by Professor Hertz is portrayed in a way understandable to the layman.

The kingdom of Italy has loaned to the mathematical section a collection of original instruments used by Marconi in his early experiments with "wireless."

The application of Bernoulli's theorem to aerodynamics is shown by models in a wind tunnel, prepared by the National Advisory Committee on Aeronautics and exhibited on the Balcony of the Great Hall.

The service to mankind of mathematics, its progress as this service is being performed and its fostering of an appreciation of the view taken by Jacobi, "the ultimate end of mathematics is the greater glory of the human mind," is the mission of the mathematical exhibits of A Century of Progress.

### The Story of Physics

Passing toward the west, along the main aisle, one comes to the section on physics, under the direction of Dr. Gordon S. Fulcher who has presented in groups the essential phenomena of modern physics.



The Great Hall of the Hall of Science



The ninety exhibits are arranged in sequence on tables five feet high, enabling all to see each exhibit before going on to the next.

How does the air in tires hold up so much weight? Why does steam exert pressure when in contact with heated water? How can electric power produce cold in refrigerators? Why are water drops round and why are crystals regular in shape? These are some of the question the exhibits on molecular physics will answer. For instance, the exhibits include a working model with steel balls instead of molecules showing how pressure is due to bombardment of the walls by molecules which have the speed of rifle bullets. An intermittent fountain, a balloon alternately expanding and collapsing under a bell jar, an engine with glass cylinders operated by electrical heat, icicles formed by evaporation, drops four inches in diameter, an umbrella shaped water film and other exhibits will be found interesting and instructive.

The exhibits in the sound section will explain how sounds are produced, how sound waves travel; when resonance occurs, what determines the pitch of a sound, how speech sounds differ and how talking films reproduce sounds. The visitor will see a large tuning fork apparently vibrating very slowly through a large amplitude; he will hear four tubes of different lengths singing in succession and will see at the same time the images of the vibrating flames within the tubes, reflected by a rotating mirror as flaming saw teeth; he will see a magnified image of the sound track on a movie film and at the same time hear the corresponding sound. In the final exhibit of this group, speech sounds will be transmitted on a light beam which the visitor may intercept if he wishes.

The great discoveries upon which is based the astonishing development of the great electrical industry of today explain the fundamental principles of the dynamo, transformer and motor. We cannot tell why an electric current affects a magnet or why a moving magnet may induce a current in a nearby coil; but the exhibits demonstrate these effects and show how modern electrical machinery makes use of these experimentally discovered principles.

By the use of lenses in telescopes and microscopes the eye is enabled on the one hand to see glories of the heavens, otherwise invisible, and on the other to study the minute structure of metals and microbes. The refraction or bending of rays of light by means of a lens is shown in an exhibit, also the way in which a lens forms an image. Another exhibit shows how eyeglasses correct defects of the lens of the eye.

The beautiful colors of soap films tell us that light is a wave motion similar to radio and that the frequency of vibration of green light is higher than that of red. An exhibit shows in a simple way how we know that the wave-length of light is about twenty millionths of an inch.

Other exhibits show beautiful colors produced by sending polarized light through a sugar solution or a crystal. Light from an arc and from neon tubes is analyzed into the component spectrum colors.

The electric eye, or photoelectric cell, is a modern genie produced by



scientific research. Exhibits show the fundamental phenomenon and also applications to the reproduction of sound. Without the photo-electric cell, television would be impossible.

The electron and the proton, tiniest of particles, cannot be seen individually, but when given speeds of 100 to 100,000 miles a second they are called cathode, canal, alpha, or beta rays, and produce effects which can be seen. Exhibits show luminous effects due to cathode and canal rays in vacuum tubes, also tracks of single alpha rays from radium, and the properties of x-rays which are produced when cathode rays strike a target. Finally a "hodoscope" will show the paths of individual cosmic rays by means of flashing neon lamps.

### **Instruments of Exploration**

If now, instead of going down the ramp to the floor below, one turns and enters the great room in the Hall of Science his eye is at once caught by two large exhibits on the main axis. One of these is a pair of globes. The lower of the two is the steel sphere in which William Beebe and his companion descended one-half mile below the surface of the ocean; the upper globe is the gondola in which Auguste Piccard ascended into the earth's atmosphere to a distance of more than ten miles.

At the south end of the room is a collection of the building stones of which the earth is composed, that is, the ninety-three chemical elements. Their source and use will also be shown. Above this display is a 10-foot rotating terrestrial globe representing our planet and showing the chief source of the common chemicals.

The inscriptions on the walls of this large room are worthy of careful study by any one at all interested in any phase of science. Over against the east wall are six pieces of apparatus, each of which sets forth



A Diorama of the late Jurassic Age. Dioramas—pictures in three dimensions—are used in hundreds of displays at A Century of Progress Exposition. The foreground is modeled in true perspective to blend with a painted background

a distinct and recent achievement in physical or biological science. Each deserves careful observation; for it is not every day that one has an opportunity to make the acquaintance of a gyroscopic compass or to view a model of the Bohr atom at close range.

## Chemistry and Its Application

Along the west wall, under the balcony, is shown the science of chemistry by means of a series of exhibits which are at once fundamental, valuable and interesting. They connect immediately with important industrial applications shown on the floor below.

The three fundamental types of chemical processes are shown—chemical change by combination, by separation, and by exchange. Various methods of producing these chemical changes are also shown.

The application of chemistry to our raw materials is forcefully demonstrated. The development of petroleum from the dirty muck to a clear, white gasoline; the transformation of rubber latex to finished rubber goods; the utilization of air for production of oxygen and rare gases; the change of the undesirable by-product coal-tar to beautiful dyes, medicinals, and plastics; the harnessing of electric power for the production of steel, acetylene, and chromium plating; and even the chemical utilization of our foods in the human body are strikingly portrayed in clear and readily understood manners. These clever demonstrations were designed mainly by Dr. Irving E. Muskat who has been in charge of the chemical section.

Before leaving the great room the visitor will find it well worth while to read the fourteen quotations on the east wall, the nineteen inspiring names on the front of the balcony and the nine groups of scientific achievement inscribed on the west wall.



Dynamic Exhibit Showing Thermit Reaction

## The Science of Life

The spectacular exhibit that represents the science of biology in the great central hall is a mechanical representation of a section of a bass-wood twig, seven and one-half feet in diameter. As you stand before it, you see it attain before your eyes, a year's growth in 75 seconds. The demonstration is performed by means of a series of plates and canvasses on a moving model, showing the direction and amount of growth of wood and bast.

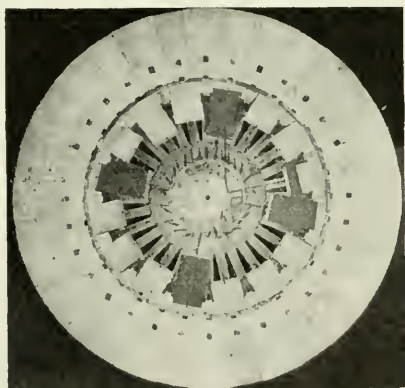
If, on leaving the great hall, the visitor strolls toward the east (which here always means toward the lake), he will find before him the whole story of modern biology presented through experimental evidence. This section has been under the guidance of Dr. J. F. W. Pearson.

Moving models of the developed human being show the finished physical machine in its internal action. A life-sized model of a man explains the circulation of the blood, with a magnified heart pumping, showing the action of its valves. A simplified mechanical reproduction of the digestive system will portray the absorption of food elements by the body.

The cell theory of plant and animal-life is illustrated by some exquisite drawings by Mr. Walter A. Weber; while the storage of food in the cells of a corn-plant is shown in a dynamic model which sets forth very clearly just what sunlight does for a plant. In the south wing of the Hall of Science will also be found the rare screen-pictures by Mr. George Roëmmert in which he projects for his audience, not a series of lantern slides or films, but those minute forms of actual living animals and plants just as they would be seen by an observer looking through a microscope of very considerable power.

Modern views of inheritance, the evidence for evolution and the physiology of the human frame are presented in a concrete way that demands careful study.

The traveler will now do well to return to the north wing of the building, entering the balcony at its south stairway, observing the mathematical display and the library of one thousand volumes and then descending from the balcony by the northern stairway to the main floor.



Mechanism for Artificial "Growing Twig" in Biology Exhibit

## Geology and Its Services

He will now find it but a few steps through the octagonal hall, where he entered, to the exhibits of the geological section which has been under the able leadership of Professor Carey Croneis of the University

of Chicago. Here, in the study of the earth's crust, one discovers how all the other sciences have been pressed into service to diagnose conditions in the interior of the earth, to locate valuable metals, to predict where petroleum will be found, to show, in brief, how all our present landscapes and geography have resulted from erosion by rivers of ice, from deposition by rivers of water, and by shearing and compressional forces still operating over large areas.

## **The "Clock of the Ages"**

The science of geology is epitomized by a giant "Clock of the Ages" which ticks off the two billion years or more of the earth's history on a conventional clock dial. Geological pictures appear on a screen in the center of the clock face, and they are described by a synchronized phonographic record. The visitor also sees operating models demonstrating the formation of mountain ranges, the growth and activities of volcanoes and the eruption of geysers. Further, he is initiated into the mysteries of earthquakes and the ingenious manner in which man has forced them to write their own records. A large group of spectacular displays of similar type, representing earth features such as the Yellowstone Geysers, the Grand Canyon and the Carlsbad Caverns, are being furnished by the National Parks Service.

The romance of oil is revealed in a great sequence of operating exhibits sponsored by the American Petroleum Industries. These displays cover every phase of oil and gas production. Other exhibits explain man's modern, almost magical, methods of locating the deeply buried raw products which formed the basis for his century of progress.

## **Science in Industry**

Everywhere the visitor turns—here, and throughout the Fair—he finds the application of science's discoveries in industrial benefits for humankind. For example, the visitor sees a real rubber tree brought all the way from Africa, from which the rubber latex seems to flow naturally. He sees the coagulation of rubber with formic acid, and then its electroplating—a relatively new process carried out by combining the electrically neutral rubber with carbon, so that it can be deposited by an electric current on the linings of chemical receptacles, tanks, and the like. There is shown also the vulcanizing of rubber, and the nature and uses of accelerators, pigments, and anti-oxidents in the processing of various kinds of rubber.

Again, industry shows the actual process by which coal tar is transformed by chemistry into dyes; how perfumes, and medicines, including antiseptics and anodynes, and T. N. T., and other things, are made from the 12 primary substances which coal tar contains.

Thus, the visitor sees the fundamentals of science, and then sees their step-by-step progress to the finished product that contributes so much to his well-being, and comfort, and health.



## The Story of Medicine

Descending now to the ground floor, preferably along the easy ramp leading down from the north wing of the main floor, one finds himself



The Transparent Man

in the midst of the three important branches of medical science, namely medicine, dentistry and pharmacology. Here, too, one finds a science which uses the best there is in each of the other sciences and then some. Dr. E. J. Carey, who has managed the collection and installation of these exhibits, has depended mainly upon the various institutions, such as universities, clinics and scientific societies. No exhibit in the entire building has more of human interest or is more cosmopolitan in character than these rooms in the north end of the ground floor devoted to the detection, the cure and the prevention of our bodily ills.

At the east end of the ground floor there stands a giant man. He is six feet tall, and rises from a pedestal three and one-half feet high. He is transparent. As

though you were suddenly endowed with X-Ray eyes you may view the inside of the human body.

This transparent man, composed of cellon, and brought to A Century of Progress from Dresden, Germany, is one of only two in the world, and required 18 months to make. He cost \$10,000. He properly begins the story of the science of medicine in this theater of the sciences.

An exhibit of the great Pasteur, sent by the Pasteur Institute from France, looms to your right, as you stand facing the Transparent Man. This exhibit, an illuminated map of the world supplemented by photographs, tells the story of the life of Louis Pasteur, and some of his accomplishments.

To the right, you will see an exhibit sent from Germany by the Robert Koch Institute, which displays the life and the work of the great man who discovered the tubercle bacillus in 1882, and started medical science upon its studied campaign against tuberculosis.

Eyes left, and you see a remarkable exhibit of the Wellcome Research Institution from England. It tells the story of the work of Sir Henry Wellcome, American, who fought the mosquito in Africa and won, and laid the way for extermination of yellow fever. The Wellcome Historical Exhibit, a museum in itself, shows you dioramas that illustrate epoch-making events in British medicine and surgery.

Northwest of the Transparent Man, the Italian exhibits show you Italy's great pioneers of the three basic medical sciences—pathology, anatomy, and physiology—respectively, Leonardo de Vinci, Morgagni, Spallanzani. With models and apparatus they tell you something of how these men, and Galvani, and Malpighi, and Vesalius, lit the lights by which the men who came after them charted their course, for the welfare of mankind.

Northeast of the Transparent Man are exhibits recording medical triumphs of research workers in the United States. Austria, Holland, Canada add their contributions, and you have an absorbing, yet colorful story to study, and to carry away with you for a lifetime of reflection. Thus, the Transparent Man stands as a symbol of world medicine, a common denominator of the nations.

You may see in the Austrian exhibits the work of Austrian scientists, and in those of Holland the structure and function of the nervous system told in a simple, dramatic way. In the Canadian section, McGill University, through murals, transparencies, and photographs, portrays the history of James McGill, and the development of the Montreal General Hospital and its work, and of the work of Sir William Osler.

It was at McGill University that the first surgical X-Ray photograph was taken, two months after Roentgen announced his discovery in 1895. The photograph itself is shown.

You can go back to 1550 B. C. and read descriptions of more than 700 different remedies for human diseases, in the exhibits of the American Pharmaceutical Association. You can watch the antics of an Indian medicine man, practicing his primitive medicine, in the exhibits of the Milwaukee Public Museum. Marquette University of Milwaukee shows you a history of Bright's disease, and the progress medicine has made to prevent and cure it.

The American Medical Association shows you the progress of medicine in the last 100 years—the old saddle-bag doctor who went his lonely way, measuring out his meager doses in sparsely settled sections,

and the physician and surgeon of today and his highly technical equipment. The American Society for the Control of Cancer shows you the advance science has made to frustrate the ravages of this dread disease; the Chicago Municipal Sanitarium and the Chicago Tuberculosis Institute tell you of the strides that have been made to subject this disease to control, and the Cleveland Clinic Foundation shows you motion pictures illustrating the discovery of the circulation of the blood by Harvey in 1628, and of blood transfusion, and of the functions of the thyroid, suprarenal, pituitary, and other glands.

It's difficult to believe that Oliver Wendell Holmes had to fight to persuade the public that doctors should exercise cleanliness in childbirth, but Harvard University tells this story in its exhibits.

Dr. Crawford W. Long of Georgia first used ether in 1842, and the University of Georgia tells you the story and shows you the development of the use of anesthetics in modern surgery.

The Mayo Foundation develops three themes in its extensive displays: 1. Diseases of the digestive tract; 2. The thyroid gland; 3. The sympathetic nervous system.

A striking exhibit, expressive of the progress of medicine in the last century, is that of the Chicago Board of Health. In 1849 the general death rate was 73.8 per 1,000 persons, in 1932 it was 9.8. The typhoid fever death rate in 1891 was 173.8 per 100,000, today it has an amazingly reduced rate of 0.4! The Chicago Medical Society and Woman's Auxiliary show you the medical history of this youth of cities. The New York City Cancer Committee shows you the history of the magnificent fight that science has waged and is waging against this malignant disease, and the University of Illinois College of Medicine, College of Dentistry, Department of Animal Husbandry, and the Illinois Department of Public Health, give you interesting sidelights on methods of treatment and causes of hay fever, tuberculosis, pneumonia, hemophilia, and rabies. The Illinois Public Health Service shows contrasting pictures of methods of sanitary handling of milk today, and of insanitary methods of other days, and presents also the health conditions of 100 years ago, compared with those of today.

The University of Chicago presents an inspiring display showing the giant strides that practical humanitarianism has made in reclaiming the crippled child for work and for enjoyment. Loyola University of Chicago shows the organs of the human body for easy understanding and study. The University of Wisconsin shows you the work of Beaumont, the first American physiologist, whose experiments upon poor Alexis St. Martin, French voyageur, up in the woods of Wisconsin, in 1833, contributed so largely to the advance of medical knowledge in the treatment of digestive disorders.

### **Exhibits in Dentistry**

In the large dental exposition, you will see the denture, controlled by heavy springs, with which George Washington, in his later years,

laboriously chewed. You may read, for a conception of the simplicity of early American dentistry, the advertisement of Paul Revere, goldsmith, printer, engraver, and dentist, offering to make false teeth "that look as well as the natural, and answer the end of speaking to all intents." The development of dental science, which is typically American, is illustrated by an exhibit of equipment of the itinerant dentist of 1833, and a fully equipped operating room of the period of 1933.

### **U. S. Public Health Service**

The U. S. Public Health Service has an extensive exhibit, which contributes further to the story of medicine's progress, in the U. S. Government building on Northerly island. This exhibit, occupying 2,500 square feet of space, shows the progress made in public health and sanitation since the establishment of the service. It is presented in divisions and shows the work of the service in combating pellagra, tularemia, undulant fever, typhus fever, spotted fever and parrot's disease. The exhibits extensively demonstrate the vast efforts the government has made, and the methods used, to exterminate disease.

### **Scientific Exhibits by Foreign Nations**

The visitor who returns to the north wing on the main floor will be splendidly rewarded for time spent in the bays occupied by Italy and Denmark. Each of these countries has a wealth of fundamental discoveries to its credit; and these are here shown in a concrete and highly interesting form—for example, a section, in replica, of the ancient Roman vessel recently rescued from Lake Nemi, after two thousand years under water; and a replica of the simple compass with which Oersted made the brilliant discovery of electromagnetism.

### **The Unity of Science**

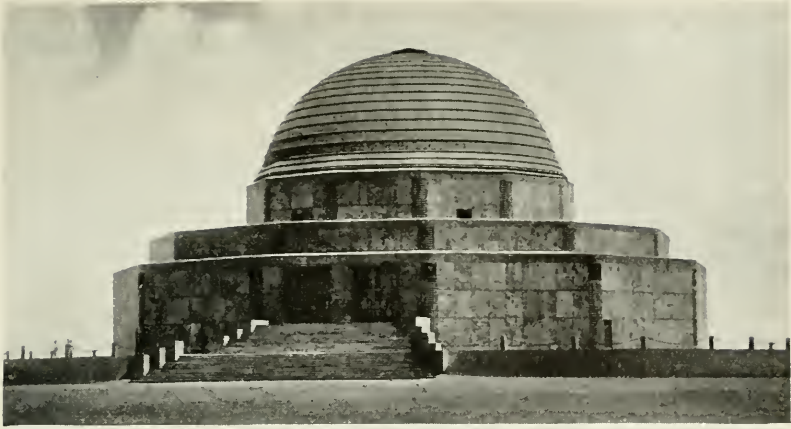
A visitor who has completed a trip through the Hall of Science can hardly fail to note that amidst the variety of phenomena, apparatus, and processes here displayed there runs one common feature, namely, the method of modern science. The problems differ, the materials differ; but in every case there is clear vision as to just what the problem is; this is followed by observation and arrangement of apparatus in such a way as to compel Nature to give an answer.

### **The Adler Planetarium**

In the Hall of Science, you will have seen the fundamentals of mathematics and physics that properly lead into the science of astronomy. Now you may cross over the Science Bridge, if you wish to finish the story of the basic sciences all at once, turn to your left, and go to the northern end of Northerly island where stands the Adler Planetarium and Astronomical Museum.

This rainbow-granite building with its mushroom dome is world famous, for within it is an intricate mechanism called the Zeiss projector,





**The Adler Planetarium**

the only one in the United States, and one of only two in the world. With this instrument is staged a spectacular drama of the heavens.

Once every hour, visitors are admitted to a circular room to sit beneath its domed white ceiling. The light is flashed off. The ceiling becomes a blue sky, sparkling with millions of stars seeming so close and so real that you feel that you can reach up and touch them.

A lecturer tells you about this firmament. His pointer is a beam of light. Behind him is a concealed switchboard, with which he controls the apparatus. You are permitted to look ahead into the future and know where the Pole Star or any other heavenly body will be situated at a particular minute of a particular day decades or centuries hence. You can look back into the past and see the heavens as they appeared when Christ walked on earth or when Galileo studied the stars with the first telescope.

Should you arrive while a lecture is in progress, you can entertain yourself by strolling about the halls or exhibit rooms downstairs. The Planetarium, which is under the direction of Prof. Philip Fox, formerly of Yerkes Observatory and formerly professor of astronomy at Northwestern University, has a wonderful collection of instruments which men of science in centuries of the past have used. Four hundred years ago the Strozzi family of Florence began a collection of scientific instru-



**The Field Museum of Natural History**

ments, gathering and preserving those of worthy achievement. About 40 years ago this collection passed into the hands of Raoul Heilbronner in Paris, and after the World War to W. M. Mensing in Amsterdam, and from him to the Chicago museum.

Downstairs you can push a button, and see exactly how the light from the star Arcturus could be caught by a photoelectric cell on arrival from its 40-year journey to earth. You see a model of the rotating prisms with which the late Albert Michelson of the University of Chicago showed the velocity of light.

### **The Field Museum of Natural History**

At the front door of A Century of Progress, directly west of the north entrance to the Exposition, stands one of the world's greatest scientific museums, the classically beautiful Field Museum of Natural History, containing contemporary and ancient exhibits from all parts of the globe, including the finds of many distinguished explorers.

### **The John G. Shedd Aquarium**

Chicago has the largest and finest aquarium in the world in the John G. Shedd Aquarium, which is located near the north entrance of the Exposition. Specimens from oceans, rivers, and lakes are displayed amid dramatic surroundings which counterfeit the natural settings in which the fish are found.

### **The Terrazzo Esplanade**

As you leave the Planetarium, you may stand on the steps and look westward down upon the Terrazzo Mosaic Esplanade, the gift of the National Terrazzo Association, which will remain as a permanent approach to this building that is visited by multitudes yearly. The esplanade begins at the east end of the Twelfth Street bridge, which connects Northerly island with the mainland at this end of the grounds, and is sloped upward toward the Planetarium, so that you may look down upon the beautiful mosaic patterns that lie in the bottom of shallow pools—twelve of them, each representing a month of the year.



**John G. Shedd Aquarium**

## From Wagons to Wings

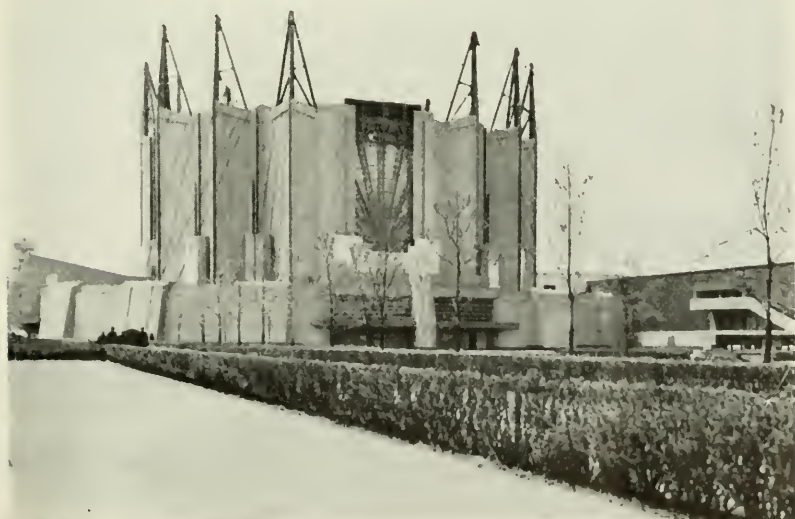
It has been only sixty-four years since two sweating gangs of laborers met near Ogden, Utah, May 10, 1869, in a thrilling race from east and west, and drove the golden spike that completed the span of the continent with iron bands.

At that time there were less than 40,000 miles of railroad in this country. Small, slow engines yanked crude cars from coast to coast, but the nation could hail them as wonderful monsters of progress. Crowds came in rattly buggies to watch the trains go by, or gratefully hauled produce to sidings in horse-drawn wagons, a market found at last, and the "Iron Horse" pounded out the beginnings of communities, cities, a wider civilization. For the first time, the west, and east, and north, and south were welded together, as one great country.

Thirty-five years later, the horseless carriage chugged its way into our existence. And now the cities and towns and farms were welded even closer, this time by speed and convenience that made it possible for farmers to get to towns and to cities, in little time, and residents of cities and towns and the farms to go places whenever the whim seized them.

Came then the airplane to laugh at miles, and make it possible to cross the continent from sun to sun.

In less than the Biblical allotment of the years of a man's life, these



The Breathing Dome of the Travel and Transport Building

modes of transportation have played a mighty part not only to permit the growth of a nation, but profoundly to affect its industrial, its political, its economical, even its spiritual life.

## A Colorful Pageant

Just south of Thirty-first street, on the lake side, you may watch the dramatization of this century of progress in transportation, the pioneer in the field of communication.

On a triple stage, in an outdoor theater, two hundred actors, seventy horses, seven trail wagons, ten trains, and the largest collection of historical vehicles ever to be used, operating under their own power, present "Wings of a Century." Here is the "Baltimore Clipper," the fastest boat of them all, from 1825 to 1850—the "Tom Thumb," first locomotive of the B. & O.—the De Witt Clinton, from the old Mohawk & Hudson (New York Central)—the Thomas Jefferson (1836) of the Winchester & Potomac (first railroad in Virginia)—then the old "Pioneer," the Northern Pacific engine of 1851—a giant locomotive of today—then the Wright brothers' first airplane. There is a one horse chaise, like George Washington traveled in, and covered wagons and stage coaches of gold rush days.

In a comfortable grandstand, with Lake Michigan for the backdrop, you may review the battles with Indians, frontier fights, the hardships of the pioneers, thrilling, epic moments in the history of the winning of the west which tell the story of how the waterways and the railways pushed the frontiers ever westward, building a nation.

When you have viewed this panorama of transportation, you will want to cross Leif Eriksen drive to the Travel and Transport building



Part of the Travel and Transport Building



designed by John A. Holabird, Edward H. Bennett and Hubert Burnham, and enter its dome.

For the first time in architectural history a dome has been constructed on the principle of a suspension bridge. Just as a suspension bridge has no pillars, columns, or arches to support it from below but depends on cables to carry its load, so the dome of the Travel and Transport building is suspended 125 feet above the ground by cables attached to twelve steel towers. The reason for the daring use of this suspension principle was the necessity for a clear, unobstructed space for exhibits. The result is a demonstration of how the desired result may be satisfactorily achieved at a much lower cost per cubic foot and we have a dome with an interior diameter of 310 feet at the base, and 206 feet clear of any obstruction.



**Detail Travel and Transport Building**

This dome is made with joints that allow for expansion and contraction as the temperature varies, resulting in a variation in circumference of more than six feet. The roof rises or sinks as much as eighteen inches, depending on the amount of snow or atmospheric pressure on the roof. This has given rise to the name, "the dome that breathes."

When your attention is turned to the exhibits themselves the first thing to greet your eyes is a mammoth crown, surmounting a pillar, from which four projection machines throw motion pictures upon a ring of screens, 30 feet high, around the walls. This 630 feet of screen forms the stage for the story, in filmed detail, of the essential contributions of oil to the powering and lubricating of transportation.

You may wish to pause and see "Old Number 9," the first sleeping car ever built, a little wooden car with open platforms and crude berths, that looks a bit humble as it stands between two great modern Pullmans, all of aluminum, and stream-lined, which are the last word in sleeping car construction for 1933. But little No. 9 can be proud of its history. First to be built, it made its initial run from Bloomington, Illinois, to Chicago in 1858. And later it was a part of the train that bore the body of Lincoln to Springfield for its final rest.

And here's an old stage coach, scarred by bullets and Indian arrows, a Rocky Mountain stage coach that could tell many a tale of bandits and redskin raids. Nearby, an original Conestoga emigrant wagon, in which pioneering families slowly moved toward new and ever new horizons, braving death and hunger and suffering.

And here is a horse and buggy. Nearby one of the old buggy-type automobiles, first of its breed, startling contrast to its modern lineage, to be seen further on in the exhibits.

An original Curtiss box-kite pusher is shown, an early type of plane, far cry in design and power, but not in years, from the monster planes that are shown later on.

Another relic of the early days is the historic John Bull engine and train, a most amusing exhibit, which was shown at Chicago's World's Fair of 1893 in those days operating under its own power.

### **Dioramas that Talk**

Passing into the rectangular section of the building you see a different diorama from any you may have seen heretofore, for its figures move, and speak. It is utilized to reproduce the scene of the laying of the corner stone which marked the birth of the railroad system. Quaint figures, in beaver hats, stocks, ruffled shirts and flaring pantaloons, faithful reproductions of the fashions of the day, carry on conversation, make speeches about this amazing event.

A depressed, illuminated map of a section of the globe shows by flowing lines of light the national and international trade routes served by a single railroad system, while paintings tell the story of transportation in the development of civilization.

Near the southern entrance of the building is the giant electric locomotive of the world. When you have walked through its cab, and examined the intricacies of its machinery, you may turn to the cherished old "Pioneer," first locomotive ever to run out of Chicago. Just the length of the tender. It stands on a piece of old style, light-weight track in front of a huge painting of its modern successor.

You will be interested also in the displays of the varied types of roadbeds, specimens of ties, and track ballast, that indicate provisions made for safety and comfort in traveling.

Have you ever rolled smoothly into a great city at night, myriad lights making a maze of miles of track? And wondered how in the world trains could enter and leave, all on schedule, without confusion? Talking pictures in color tell you that story of the inside working of railroad operation.

The great Southwest is a land of romance, and a series of elaborate dioramas show the progress of this vast section of the country in the past 100 years. The dioramas tell the tale of cotton, livestock, wheat and oil. Young, dynamic, bustling cities of this section are shown with other dioramas. A map of Glacier National park is alive with miniature trains in operation.

### **And a Story of the Old Rough Days**

Pony express riders once spurred their mounts across the plains, braving dangers of bandits and Indians, and writing a colorful history. Seven paintings depict this story.

On tracks, under roof, are a glass-lined, steel refrigerated milk tank

car, built for speed to rush milk fresh and sweet to modern homes, far cry from the old horse-drawn milk wagon, and tin milk cans. Also are exhibited a model refrigerated meat car and a dry-flow tank car for products such as cement and soda ash.

### The Automobile Link

A "glass automobile" makes a striking exhibit, showing through nine panels of glass the parts of the machine in action while an electric fountain illuminates them with colors.

### The Age of Aviation

A great illuminated map tells one in swift summation the amazing growth of aviation since its comparatively recent birth, showing a lighted network of airways serving forty-four states, and dramatically exhibiting the night flying operations. The map illustrates the increase in travel by air since 1926, when 4,600,000 miles were flown, to 1932, when 50,000,000 miles were flown, 40 per cent of which was night flying. This map and other exhibits of flying service are sponsored by the air mail-passenger operators of the United States.

Different types of plane, both for domestic and foreign service, are on display.

### The Aid of Oil

In the Great Hall is shown a complete oil well derrick, demonstrating the underground work, a rotary bit biting down through the layers of rock and sand. The chassis of an automobile is cut away to show motor car lubrication, and a spectacular clanging of gongs, and shrill of sirens, and whirling wheels of a fire engine add life to this section of the exhibit space.

### Striking Exhibits in Outdoor Area

South of the Travel and Transport building, is an outdoor area for exhibits. You can see one of the fastest and most luxurious trains in all of Europe, the "Royal Scot," crack train of the London, Midland and Scottish railway. This train makes the run from London to Edinburgh in eight hours regularly.



The "Royal Scot"

On one side of the "Royal Scot" stands a gigantic Chicago, Burlington and Quincy locomotive at the head of a U. S. Railway Postoffice car, chair car, diner, two sleepers and solarium lounge car.



**Dining Salon—Private Train of the President of Mexico**

On the other side of the British train are the air conditioned cars of the Baltimore and Ohio Capitol Limited, representing the eastern roads of the United States.

On the next track are the palatial special coaches of the Presidential train of the Republic of Mexico, which are considered by many to be the most luxuriously furnished cars in the world. On display in one of the cars of this train is a priceless collection of jewels, the famous Monte Alban gems. These gems have been traced back to early lapidaries of the ancient Mexican civilization. They comprise ornaments of jade, jet, ivory, amber, bone, and the like, set in gold, recently recovered from ruins and rubble.

One of the largest freight locomotives in the world is shown by the Delaware and Hudson railroad.

A demonstration of mine rescue equipment and its use is shown nearby, in a U. S. Bureau of Mines rescue car, and General Steel Castings company show a new type gondola car of unique construction.

### **A Tractor Run by Radio**

A farm tractor crawls about a two-acre field, controlled in its maneuvering solely by radio, from a switchboard at the edge of the field. This is the exhibit of the International Harvester company, which also shows operation of cultivating and harvesting machinery on simulated crops. Demonstrations of trench and ditching machinery are given on the demonstration field by the Barber-Greene company.



## A Glass Tower Parking Place

A glass tower of the Nash Motors is a spectacular feature of the outdoor exhibit. This parking tower, built by the Whiting corporation, cooperating with Nash Motors, is eighty feet tall, and it carries sixteen cars, each car in a pocket, its full height. Colored lights bathe the tower, and Nash cars pass up and down in continuous movement, bringing each car into a glass-fronted show room at the tower's base.

## General Motors Building

The part that automotive engineering has played in our civilization is graphically represented in the General Motors building.

It stands on rising ground at the foot of Thirty-first street in the midst of a lovely, formal garden surrounded by willows and with Lake Michigan as its background.

The building is an eighth of a mile long and 306 feet wide, surmounted by a 177-foot tower, brilliantly colored, and illuminated. It was designed by Albert Kahn. The entrance hall divides two main display rooms, each containing 18,000 square feet. Here the cars of General Motors are on exhibition. In one of the rooms the General Motors Research laboratories present a display of their own.

The central feature of the building is a complete automobile assembly plant, to the rear of the display rooms, where 1,000 people at a time may witness the assembly of automobiles. Raw materials enter through one door and by the time they reach the opposite exit, they have become finished cars. A visitor may select the materials for his car as it enters the door, follow its progress along the assembly line, and get in and drive it off at the other side of the room.

Sculptures—symbolizing the automotive industry, a huge mural painting, dioramas, exhibit areas for trucks and other General Motors



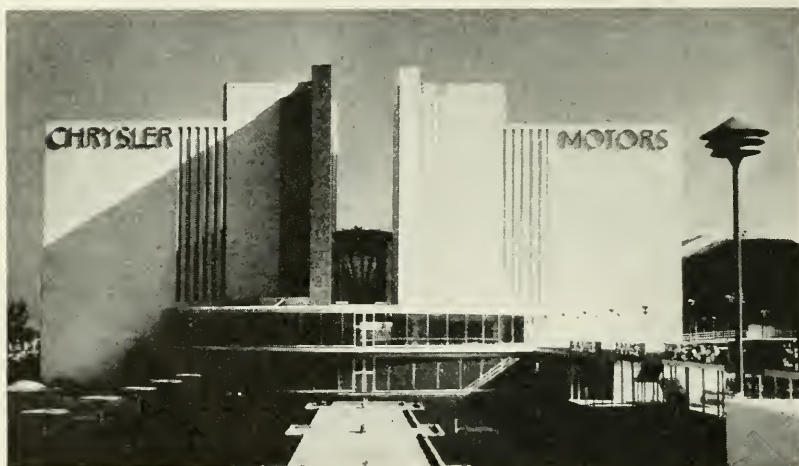
The General Motors Building

products, a theater for the presentation of sound films, rest rooms and spacious lounge rooms are among the features of this building.

### **The Chrysler Building**

Rising just north of the Travel and Transport building is the Chrysler building, with its lofty pylons giving it a commanding presence. You will be charmed by the contrast its modern architecture presents to the ages old Maya temple across the drive, and by the interesting counter-balance it presents to the dome of the Travel and Transport building. In the circular section of the building are displayed the latest models of the Corporation's various cars, together with cross sections of motors, demonstrations of tests for heat, cold and water resistance of motors.

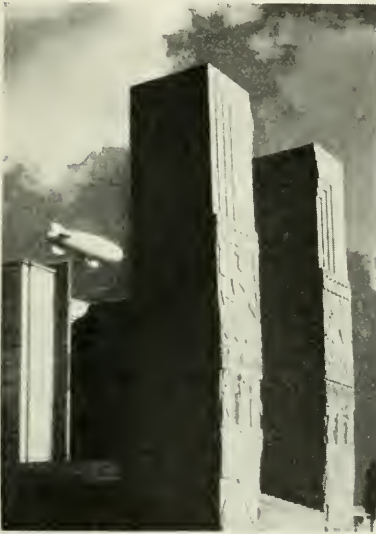
The terrace connecting this portion of the building with the display room at the north end offers an excellent vantage point for viewing the endurance and other tests which will be made on the proving ground to the west and serves as a roof for the space in which visitors will be permitted to inspect those automobiles which have been submitted to experiment.



**The Chrysler Motors Building**

## The Servant That Has Transformed The World

Move southward along the shore of the lagoon, on Northerly island, from the Twelfth Street side, or cross Science Bridge, at Sixteenth street, and you will come to a circular court above which rises a brilliant silver fan of light.



The Water Gate of the  
Electrical Building

In the court a fountain sends up iridescent jets of illuminated water in a series of multi-colored steps. Out of the center of the fountain rises a 70-foot canopy. The under side, of hammered copper, chromium plated, reflects the color and disseminates it, and achieves a superb beauty.

This is the court of the Electrical building. The great building itself, in semi-circular form behind the court, connects with the Radio and Communication building. A group of pylons rises, with a giant bas-relief panel on either side, forty feet high, on which figures are sculptured in such mammoth size as to suggest the enormous forces they symbolize. One represents

Atomic Energy, bearing the inscription: *Energy is the substance of all things—the cycles of the atoms, the play of the elements are in forms cast as by a mighty hand to become the world's foundations.* The other panel symbolizes Stellar Energy, and bears the inscription: *Light is the beginning of all things. From the utmost ether it issues, shaping the stars, answering in its patterns to the majesty of creative thought.*

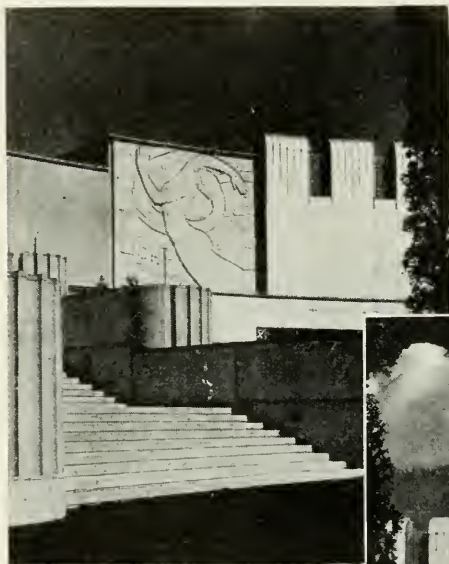
There is an entrance here, which leads to a great circular hall. Another entrance is on the west side from a water gateway, flanked by two huge pylons more than 100 feet high, and a wide stairway leading up to the hall. This water gateway provides a landing for visitors who come from the mainland by water across the lagoon. On these pylons also are sculptured figures, *Light* on the north pylon, *Sound* on the south one. Perhaps, if you come from the Hall of Science, where you are told that electricity is simply the movement of electrons, migrating away from the infinitesimal atom, the dazzling spectacle of Electrical

Court, and the illumination of its buildings, and the vast and spectacular compositions of light that flood the Fair may awe you by the very stupendousness of the story electricity tells in this phase alone of its myriad activities.

But the story within these two buildings, of which Raymond Hood was architect, is more stupendous still.

### **You Enter the Great Halls**

Twenty companies share the great hall, with a wide variety of exhibits, many spectacular. Here, for example, you will see demonstrated the new "fever machine," a gift of science to medicine with which hospitals are experimenting now, in the hope that it will be of



**Left—Light,  
A Plaque on the  
Electrical Building**



**Right—Energy,  
Substance of All Things,  
a Plaque on the  
Electrical Building**

incalculable value in the treatment of many diseases. Photoelectric tubes—the "electric eyes" we have seen demonstrated so startlingly throughout the Fair—are made to do tricks that demonstrate countless possibilities.

A high frequency furnace is shown, and you see a new blade quickly melted, while the hand which holds it, in the same furnace, is uninjured.



You see an incandescent light no larger than a grain of wheat, a marvelous aid to surgeons. Also the world's largest incandescent lamp, of 50 kilowatts. You see sun lamps as they are used in the poultry industry, and in hospitals, schools and offices.

Beneath the floor, seen through a glass walk, a model section of the world's largest water-wheel generator rotates in a flood of light. Again, here is a huge model of a transformer, the largest ever built. There are extensive displays of electrical equipment and lighting effects, model kitchens, model laundries. Models of great ocean liners are paired with an open model of the electrical equipment that propels such liners.

## **An Amazing Diorama**

On the mezzanine, the largest diorama in the world tells you a thrilling, inspiring story. Suddenly the great scene, 90 feet long, leaps into life. Reservoirs in the mountains take the flow from moving rivers, turbines begin to spin, across the plains lights in lonely ranch and farm houses glow in the dusk; the movement races on into a city that takes on life, the streets imbued with activities inspired by great industries, tall sky-scrapers, homes and hospitals, stores and factories, theaters, churches, rushing elevated trains and subways. A steam electric-generating station with switchyards leading into it, and trains running; an airport, and planes *live*. On to another city, from coal mines to farms, to quarries, to many other phases of industry now served by electric power goes the precious current.

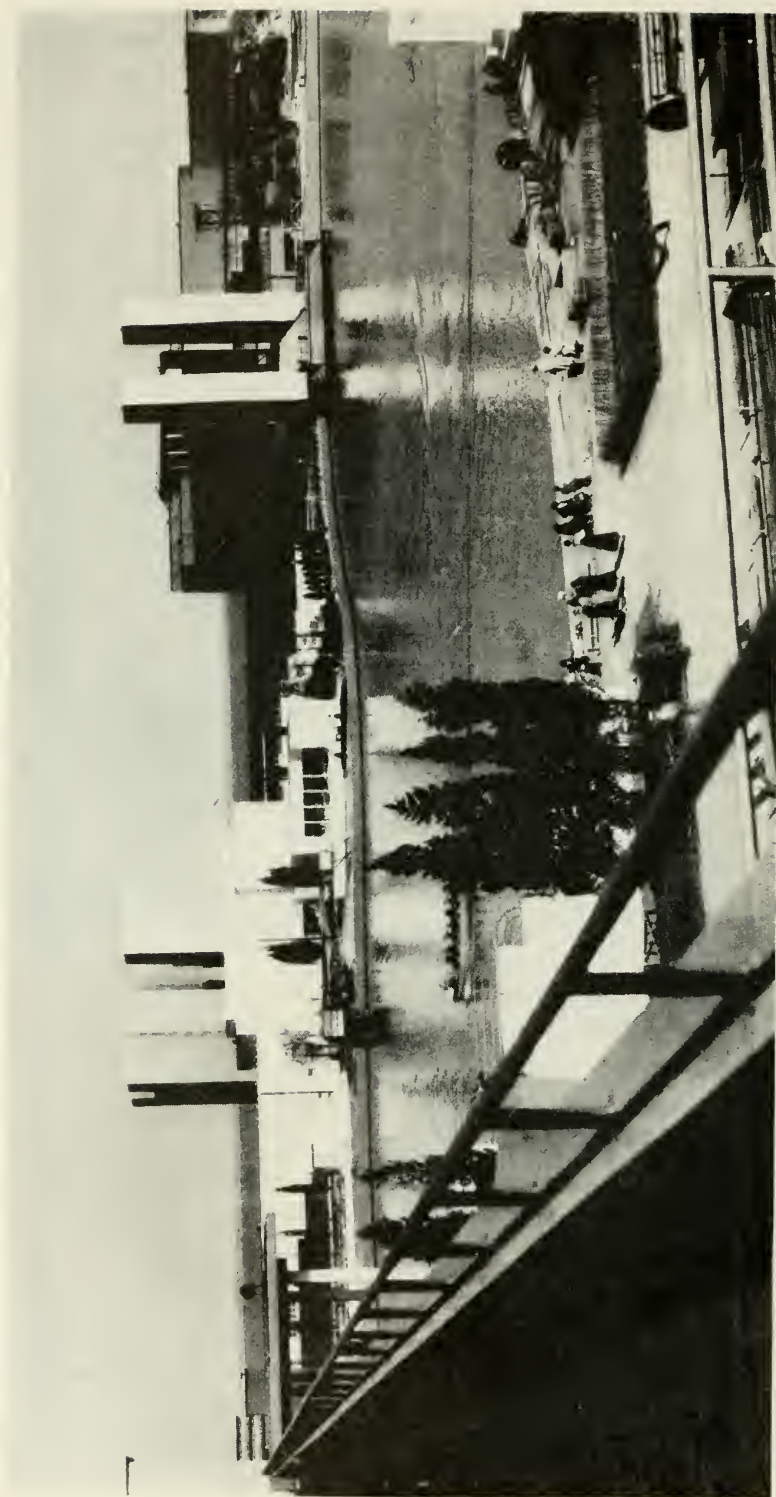
A voice speaks out of the darkness, explaining. And thus, in moving drama, you get the story of electricity from its generation, to its varied service of dispelling darkness, driving machines, and serving households in myriad ways, made possible by hydro-electric transmission. The first hydro-electric station in the United States was built just 50 years ago, near Appleton, Wisconsin!

The diorama is a part of the Central Station Industry Exhibit, displayed by the united power station companies of the nation.

Other striking exhibits you see here on the second floor are full-sized rooms of homes, showing the many uses of electricity in the home; farm buildings, showing farm electrification—its uses on the farm from bug killing to silo filling and powering of machinery. Five model stores tell a graphic story. Electric furnaces that have made possible the utilization of cast iron, and other demonstrations of the applications of electricity in power, heat and light in industry are shown.

## **A Neon Display**

In space beneath the balcony you discover the absorbing process of filling tubes with the rare gases that make the brilliant colored lighting, so much of which you see utilized in the lighting of the Fair, and now used so extensively for advertising. An electric fountain features the space. Three striking demonstrations of illuminating effects tell something of the future possibilities of this form of lighting.



The Electrical Building and the Radio and Communications Building

## The Radio and Communication Building

When Raymond Hood planned this building, he had in mind the close relationship between communication and the industries devoted to generation, utilization and distribution of electric power. He symbolized their union by joining their buildings.

Leaving the great hall of the Electrical building, you step into the radio show, where are demonstrated the mysteries and the fascination of world-wide reception.

The small boy who has just begun to tinker with batteries and receivers, or the seasoned adult who has kept up with the swift development of this new science, will each find the points that interest them simply and graphically told. The show culminates in a display of novel and "trick" sets, and apparatus hinting of future developments. On the balcony of this connecting link, also, you will see a reproduction of a Hollywood movie set, and some interesting motion pictures of the World's Fair itself.



Entrance to Radio and Communications Building

## **Inverted Speech and Magic Answer Board**

Entering the communication area, perhaps your attention might first be attracted by the "Bird Cage," where you see demonstrated what is called accoustical illusions. You speak in a low pitch, but you hear it high, and vice versa; you hear speech inverted so that it becomes unintelligible when received over the ordinary radio set. In another exhibit you learn how privacy is obtained in radio telephone conversation. Other exhibits show you the mysteries of the dial telephone, and how operators handle your telephone calls. You see twelve conversations carried on simultaneously over a single pair of wires, and an oscilloscope shows you the wave form of spoken words, and then of musical notes.

There's a magic answer board featured in the telegraph display. You push a button and get answers to your questions about telegraph service. Here, too, you see an historical exhibit of the development of the telegraph from Henry's electric bell of 1829, to Morse's relay and register of 1844 and other developments of his genius.

## **Communications Garden**

One of the most impressive features of this building is Communications Garden, fronting on the Lake Michigan side of the island, which may be reached from either floor level. These gardens give a modern impression of the immortal gardens of the Villa D'Este at Tivoli, near Rome. In the center four gigantic pylons rise like massed cypresses, more than 100 feet in the air. They will be visible far out into the lake and from points in the Exposition grounds on the mainland. In the base of these pylons are pavilions in which may be shown exhibits depicting the history of wire communication.

Appropriate landscaping, trees, shrubs, grass, fountains and striking bits of sculpture make the gardens a delightful place for people to meet and keep appointments.

You may spend hours in this great building, hours of fascination and delight, and perhaps of awed wonder that in less than a century all these miracles of electricity have come. And then turn perhaps with something of reverence to a building that sits on the edge of the Lagoon, adjoining these Electrical buildings—a memorial to Thomas A. Edison.

## **The Edison Memorial**

It was in 1879 that Edison, watching a charred cotton thread in a glass bulb glow for 40 hours, ushered in the new era of light. Steinmetz, another great electrical genius, declared that Edison had done more than any other man to foster the growth of electrical engineering. And so tribute is paid to him, in the only building in the Exposition erected to the memory of one man, in the Edison Memorial. It houses displays setting forth the many evidences of his inventive genius, and their effect upon the world. About the building is a beautiful garden brought from Edison's home in Orange, New Jersey, where the "joyous inventor" spent most of his leisure time.



## The Stirring Story of Mankind's Rise

When you have finished your study and enjoyment of the story of the basic sciences—of their discoveries and their applications to *man's material existence*—you may cross the bridge from the Hall of Science, eastward, and see his beginnings, and watch his way unto the present day.

On the north side of the two-storied Hall of Social Science which houses these exhibits, strikingly sculptured pylons will cause you to stop. At the left is a youth with two heads, with a goat by his side; flames rise from the figure depicting, in allegory, the Indian symbols



Pylons and High Relief, North Entrance of the Hall of Social Science

for the God of Fire. At the right, is the God of Light, and next to it, a female figure representing Night, or Darkness, and next to this is the God of Storm. The figures are by Leo Friedlander.

Within, you may read the history of man, and study the stages of his development. Perhaps you will find an answer to the perplexities of the present that cause our sometimes querulous questioning of the worthwhileness of things.

## **A Story of Timely Significance**

Fay-Cooper Cole, chairman of the department of Anthropology at the University of Chicago, who has had charge of the staging of this gigantic show, sums up the significances of the Social Science exhibits in these words:

"At the end of the Sixteenth Street bridge, in the Hall of Science, and, in fact, throughout the Fair grounds, the visitor sees a century of progress in scientific achievement. At the other end of the bridge, in the Hall of Social Science, he can see the social consequences of this scientific achievement. The century of scientific progress has changed our whole social and economic life. It has changed our transportation, our whole method of living.

"The old moorings are gone. We all feel somewhat at sea. The depression has most decidedly sharpened the interest of the public in social changes, and has brought home to it the importance of meeting them intelligently. We hope to show how social science tries to meet these great changes."

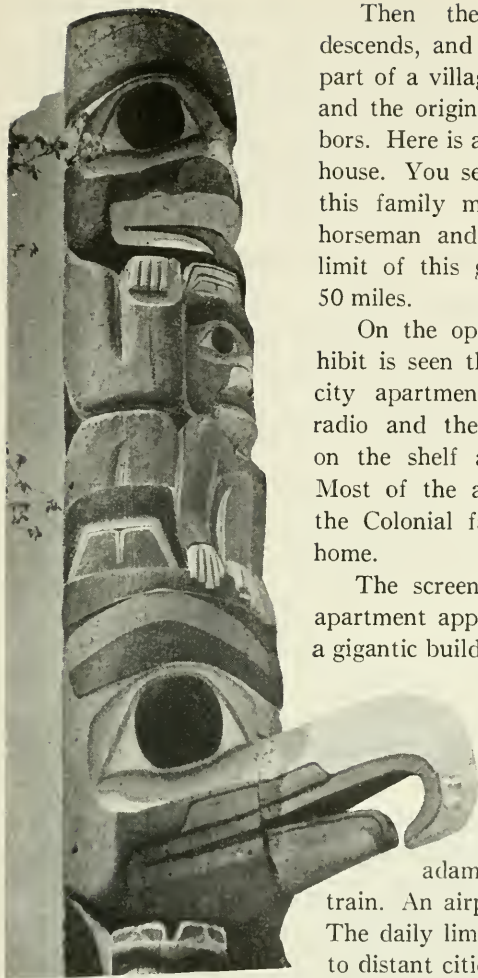
So, it is a story of cause and effect that you will carry home with you from A Century of Progress. Here in the Social Science part of the story you can see, in dramatic sequence, the cave life of fifty thousand years ago, the life of the Mayas and aboriginal life as shown from mound excavations, and the life of the American Indian, the early American home, and on through the age of "oil lamps, horseshoes, wagon wheels and corsets," to the "age of electric lights, radios, automobiles and refrigerators." And you will find a simple but graphically told tale of capital and its distribution and redistribution; of the problem of immigration and overlapping governments, educational evolution and the latest methods of teaching; homes of ultra-modernity and, possibly, what they may be in the future; a model community and government.

## **An American Family Is Central Exhibit**

As you enter the ground floor of the Hall of Social Science you are attracted by the visual story of an American family.

Here is a group, almost life size, that shows a Colonial family. The women are spinning, weaving, and making the garments by hand. Other members of the group are drying fruits and meats.

Through a doorway you see the father of the family breaking the sod with an old fashioned plow.



Aboriginal America—  
A Totem Pole from  
the Indian Exhibit

Then the scene changes—a screen descends, and you are shown this home as part of a village, people have come to settle and the original family has acquired neighbors. Here is a church, a school and a courthouse. You see the boggy road over which this family must travel, and on which a horseman and a stagecoach struggle. The limit of this group's horizon for a day is 50 miles.

On the opposite side of this group exhibit is seen the family of 1933 living in a city apartment. There is the inevitable radio and the modern refrigerator; while on the shelf are cans of prepared foods. Most of the activities and amusements of the Colonial family have gone out of this home.

The screen descends again. This same apartment appears on the map as a part of a gigantic building, and it in turn is part of a mammoth city, and you see its amusement places, parks, boulevards, playgrounds, schools and factories; that miry road has become a smooth, macadam highway. There's a railroad train. An airplane flashes across the skies. The daily limit of this family now extends to distant cities. Down the aisle to the left is the dramatic story of anthropology.

### Drama in a City Dump

A huge relief map is the first exhibit, showing the nine culture areas of North America. Traveling lights on the map explain the significance of the exhibits outside the Hall of Social Science, and the methods of social scientists in determining the growth and development of cultures.

Pause here and look upon a common city dump. Would you think it could tell a story? It does—a story that explains graphically how the past is read. Electric lights, radios, automobiles and a myriad of other things which we use daily contribute to the dump of 1933. In 1893, the castoffs of a city were oil lamps, horseshoes, wagon wheels and madam's stays. Not only do you see in a flash the differences between the two eras, but also you realize how those who delve into the ages can read stories of other civilizations. Such a comparison helps you to live the past illustrated by the exhibits of anthropology down the aisle.

After the city dump, you see a section of a cave taken from Europe that reveals records of 50,000 years ago. For centuries it has been sealed in rock. You see exact reproductions of the mounds which Indians built in Central Illinois through three successive cultures—you see the skeletons of Indians long dead, accompanied by the objects that were buried with them. A stratified village site emphasizes how the records of the ages are steadily being discovered and read.

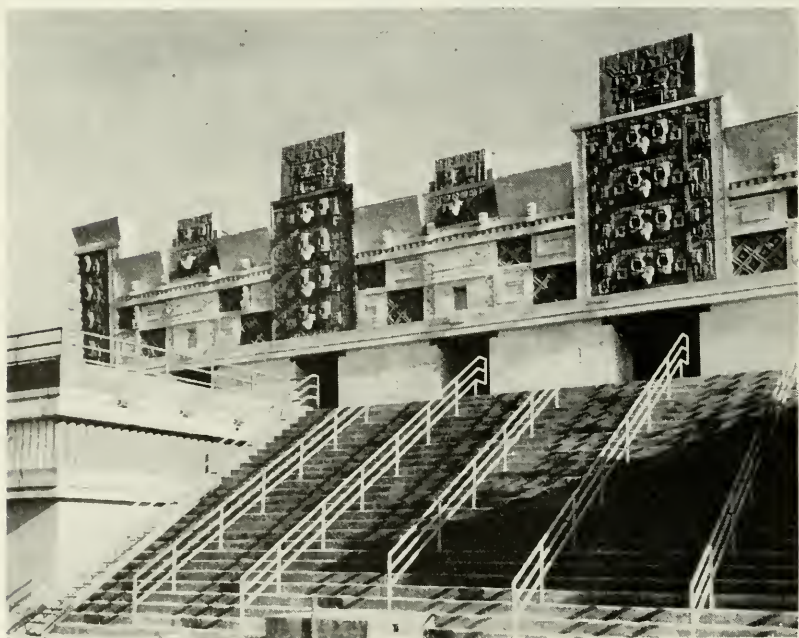
### **Then Trace the Threads of Our Own Existence**

As you pass through the pages of history, you follow naturally the ramifications of our increasingly complex existence.

You trace the economic aspects of industry, and of agriculture, and see the maze of distribution processes that deliver necessities, and luxuries to our doors. You see the reasons for the prices of things, the cost of making, and the profit.

You see how a dollar is distributed and redistributed, multiplying into millions and billions, in causes of charity, in taxation. Complex things are made clear with simple exhibits that avoid the controversial and seek simply to show you the fundamentals of the scheme of things in the structure of world trade.

Moving pictures and dioramas record the coming of peoples of other lands to the New World, to form cities within a city. The population grows, fed as a sea from countless streams. Such growth creates problems of transportation, of industrial demands, of housing, of church



**A Maya Temple—The Nunnery at Uxmal**



and of school, of varying social codes, of delinquency, of racial requirements, of needs for recreation and of sanitation.

Finding the solutions to these problems requires money, and the setting up of organizations for handling them. A variety of governments may be functioning to care for the needs of only one small community. Moving lights show you the governments to which your money goes, and the estimated percentage of it actually returned to you.

### **Maya Temple—Torn From A Thousand Years' Jungle Growth**

And now, from the broad terraces of the Hall of Social Science, look away southward toward Thirty-First street, where the Maya Temple rises. When you come closer, like a pilgrim nearing a shrine, you may find it difficult to believe that this temple is an exact copy of a building in far away Yucatan, a temple at least ten centuries old, a bit of the 2,000 or more year old civilization of the Mayas. It stands on the highest ground within the Exposition boundaries, its walls covered with elaborate designs, huge mask heads, and great serpents carved in stone. Tulane University, under the sponsorship of A Century of Progress, sent an expedition, in charge of Dr. Franz Blom, director of its department of Middle Western research, to Uxmal, ancient seat of Mayan culture, and there they obtained the information necessary for making an exact reproduction of one section of the famous "Nunnery." They brought back casts of its decorations to be incorporated in the Fair's temple.

The Mayan civilization probably had its origin hundreds of years before the Christian era, in the highlands of Guatemala and Honduras. From there, apparently, it spread slowly into Yucatan, where its highest development was reached about 1200 A.D. These people, without elaborate mechanical equipment built great cities in stone. On the tops of 200-foot rubble and cement pyramids, stood stately temples, government buildings, and astronomical observatories, faced with cut stone and decorated with geometric designs and carvings representing men and animals.



**Decorative Detail, Maya Temple**

We know that they developed hieroglyphic writing, that they had a mathematical system based on zero, and that they knew much of astronomy. They made use of several metals, especially gold. Some of their ornaments have been found; beautiful mosaics, and lovely wood carvings.

Descendants of the Mayas yet live, in Central America, but the civilization of their ancestors has vanished.

Within the temple, priestesses kept the sacred fire burning; to let it die out meant death by stoning; and loss of chastity, death by arrows. They wove garments for the priests, who occupied large residences on tops of the pyramids, and for the idols. On festival days the idols were dressed in a glory of fine clothing, and gold and jade.

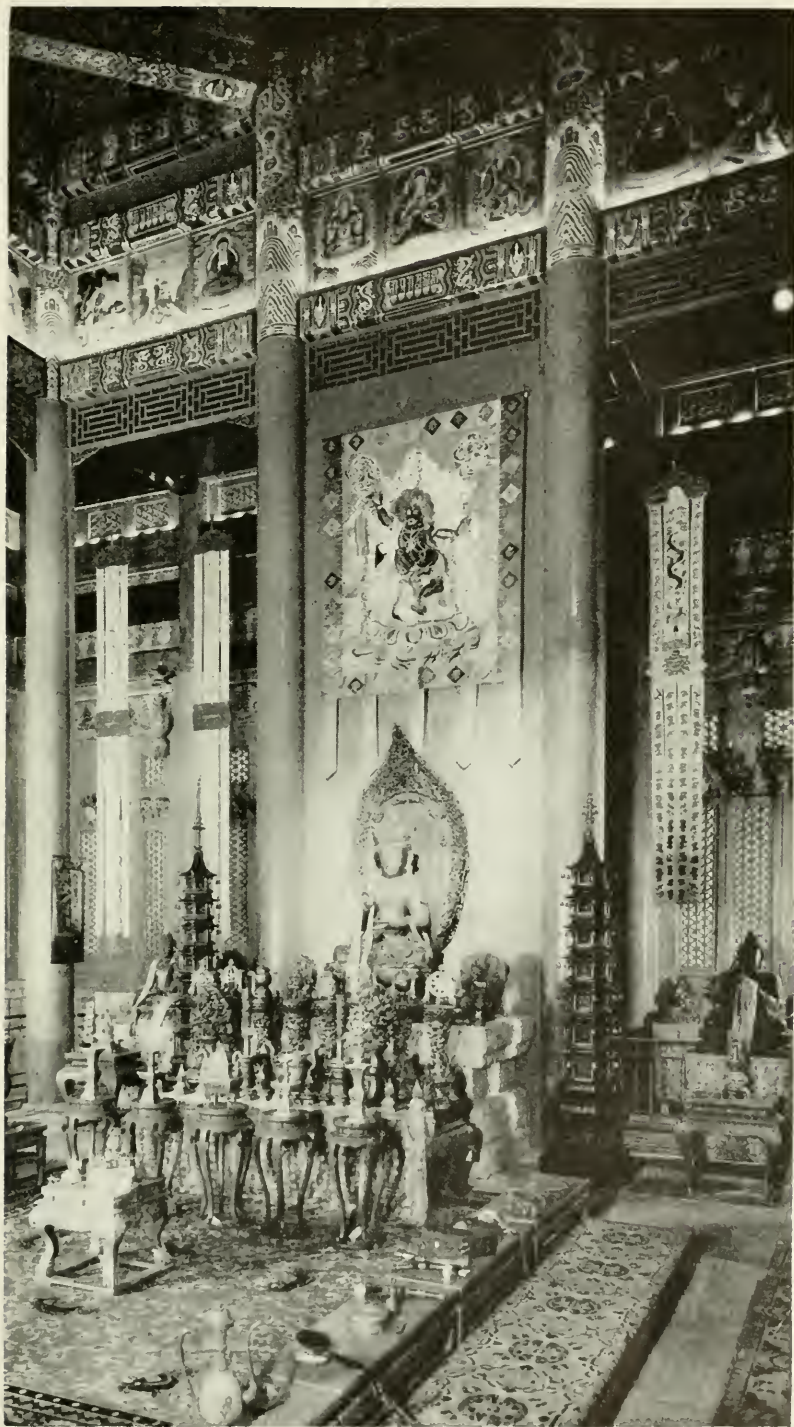
And from this story of a vanished civilization you go out to view the living descendants of another civilization—the North American Indian.

### **The Indian Villages**

To the north and across the pedestrian way, stretches the area in which the North American Indians live, during the Fair, in as close an approximation of their native life as it is possible to attain. A section of a Northwest Coast village is reproduced, with a plank house and carved totem poles. Next is one of the woodlands groups living in wigwams and practicing a limited agriculture. In contrast to these are the tipi-dwellers of the plains, whose greatest source of supply was the buffalo hunt. Then come the Navajo, roaming people, in some measure, and then the Pueblos, with terraced villages.



**The Golden Temple of Jehol**



Interior—The Golden Temple of Jehol



All about these tribal homes swirls the colorful panorama of the Fair. And it's only a little way in steps—but centuries in time—to another striking display of life, the modern American home.

## **The Bendix Lāma Temple**

From the present with its daring structures of steel, embodying modern ideals of beauty and utility, you may travel swiftly through the centuries and halfway around the world to an alien shrine.

It is the resplendent sight of the Golden Pavilion of Jehol, its gold-leaf roof glistening in the sunlight, that transports you to China of the Eighteenth century, with its culture and art that amaze and delight us today. It is placed westward from the Hall of Science, at Sixteenth street, like a jewel in a magnificent tiara.

The Golden Pavilion, the original of which was built in 1767 at Jehol, summer home of the Manchu emperors from 1714 until the termination of the dynasty twenty years ago, was brought to the 1933 World's Fair and the City of Chicago by Vincent Bendix, exposition trustee. Dr. Sven Hedin, noted Swedish explorer, acting for Mr. Bendix, spent two years in Mongolia before he selected this as the finest existing example of Chinese Lama architecture.

Exact reproductions of the 28,000 pieces of which the Temple is composed were made and numbered at its original site in China. A Chinese architect was employed to interpret these marks and to direct their assembly on the exposition grounds. Chinese artists painted and decorated the finished structure.

The Golden Pavilion is 70 feet square and 60 feet high, rising from a 4-foot pedestal. Its double decked roof of copper shingles is covered with \$25,000 worth of 23-karat gold leaf. On the exterior, twenty-eight columns in red lacquer, 16 feet high, support the lower deck. Twenty-eight other columns, 30 feet high, form part of the wall. Inside, twelve 37-foot columns support the gilded ceiling and the upper deck.

Carved grills, in red, blue, yellow and gold, enclose the glass window panes. The cornice beams are gilded and carved with images of dragons, cats, and dogs. Hundreds of pieces of carved wood form the ceiling.

A Chinese guide, speaking excellent English, describes for you the treasures contained in the Temple. One of the interesting objects he points out is the "prayer wheel," which the devotees turn instead of repeating prayers. One turn of the wheel is the equivalent of many million prayers. There is an interesting temple drum, trumpets so long that the player requires the services of an assistant to hold them up, bronze and gilded wooden Buddhas, images of numerous other gods and goddesses, altar pieces, incense burners, trumpets, masks used in sacred dances, silver lamps, temple bells, and rare carpets.



# Beautiful Homes of Today and Tomorrow

## Home Planning Hall

Though not technically a part of the Social Science group, a culminating chapter of the story could center in Home Planning Hall, and in the homes which make up the housing section of the Fair. North of Thirty-first street, Home Planning Hall and a group of eleven houses are designed to show progress in architecture, comfort and economy.

Home Planning Hall is the general exhibits feature of the Home and Industrial Arts Group. It is devoted to exhibits of heating, plumbing,



The Home Planning Hall

air conditioning, refrigeration, home equipment, household appliances and building materials.

Grouped around the buildings on the lake front, with appropriate landscaping, are eleven exhibit homes. Eight of them undertake to illustrate in a modern way, to the family of limited means, the use of prefabricated building units, new materials, and new methods of construction. All these small houses are designed without cellars and with integral garages. All but one are constructed with flat roof decks and solariums which make maximum use of sunlight for health and enjoyment. All seek to cut the cost of small home construction and provide greater living values.

Most of the group were produced by manufacturers to illustrate use of their materials, yet architects and decorators have had full play in carrying out the theme of progress, wholly aside from the commercial factor involved. The houses in this interesting group are listed below:

### **Brick Manufacturers' House**

Andrew Rebori, of Chicago, is the architect. The house was built by the Common Brick Manufacturers' Association, and demonstrates reinforced brick construction. The house is built, virtually, in one piece: walls, floors, and ceilings, all of brick, are held together as a unit by steel rods run through the masonry. It has three stories with balconies on the two upper floors. The second floor includes the living room, dinette and kitchen, and the basement floor the cooling and heating plant. The third floor has two bedrooms, bath and porch, and the roof a recreation deck and garden. Cost, \$4,500.00, exclusive of equipment. Interiors by the Brick Manufacturers' Association

### **Armco and Ferro Enamel House**

This house was built for the American Rolling Mill Company and the Ferro Enamel Corporation, by Insulated Steel, Inc. This house is unique in that it is frameless; no structural steel being used. The walls are box-like units, factory fabricated, house high, and welded at the shop in various widths. When set up, the walls are filled with rock wool. The exterior is panels of vitreous enamel iron nailed on with "belyx" nails. There are seven rooms, bath and lavatory, and integral garage. The deck roof gives space for a solarium and open porch. There are four bedrooms on the second floor, with six large closets. The architect was Robert Smith, Jr., of Cleveland. Cost, exclusive of equipment, \$4,500.00. Interiors by Kroehler Furniture Company and Ladies Home Journal.

### **General Houses, Inc., House**

This is another all-steel, frameless house, with nothing made at the site except the concrete piers. The steel chassis was set in place, and the panels bolted on to form a complete shell; then the roof panels were bolted on, windows and doors installed, and the house was ready for

paint. It has been estimated by the General Houses, Inc., that these simple units make possible an almost endless variety of designs, and that a week's time could suffice for the erection of a four or five-room house. Howard T. Fisher, of Chicago, was the architect. Cost, exclusive of equipment, \$4,500.00. Interiors by Kroehler Furniture Company.

### **Good Housekeeping-Stransteel House**

Here is a steel frame house of highly modern design, with a large recreation room on the second floor. The exterior is enamel-finished steel, backed with Haydite and fastened with nails. Two bedrooms are on the ground floor. The large recreation room on the second floor gives access to the terrace, which covers the greater part of the flat roof. The architects were O'dell and Rowland of Detroit, Mich., with Dwight James Baum of Good Housekeeping Magazine as consultant. Cost, exclusive of equipment, \$7,900.00. Interiors by Good Housekeeping Studio.

### **Rostone House**

A six-room house built by Rostone, Inc., and the Indiana Bridge Company. Rostone is a building material composed of limestone and shale, and can be had in any color. The material is prefabricated in standard sizes. The house has all the living quarters on the first floor, with a glass-enclosed solarium occupying a fourth of the space of the roof deck, which covers the entire house. The architect was Walter Scholer of Lafayette, Indiana. Cost, exclusive of equipment, \$6,000.00. Interiors by Thomas E. Smith, designing engineer, Chicago.



Interior—The Stran-Steel House, the Recreation Room

## **"Design for Living"**

John Moore, of New York, was the architect and builder of this unusual house. It is of two stories; the first includes a large living room, with two L-wings, one a commodious dining room and the other a library study opening on a large porch. The upper floor holds two bedrooms with bathroom between. The full length of the house is occupied by a roof terrace, giving room for outdoor sleeping, and for recreation. Cost, exclusive of fixtures and equipment, \$4,000.00. Interiors by Gilbert Rohde, interior designer, New York.

## **Masonite House**

This house was built by Masonite Corporation, with Frazier and Raftery, Chicago, as architects. It has a living room with 12-foot ceiling and large groups of windows on two sides. The dining bay is part of the living room, with a group of windows, centered by a French door, leading to a terrace. Two bedrooms and bathrooms are also on the first floor, with a wide hall and staircase giving access to the den upstairs and the covered and open decks of a modern roof. The walls of one of the bedrooms are covered with broad-loom woven cellophane, with hangings of knitted cellophane. Cost, exclusive of equipment, \$7,500.00. Interiors by Marjorie Thorsh, interior decorator, Chicago.

## **Lumber Industries House**

The National Lumber Manufacturers' Association built this house. It is a five-room dwelling, modern in design, and, differing from other houses in the group, has a pitched roof. The walls and ceilings are paneled with various woods, achieving unique designs and demonstrating logical lumber uses. Ernest Grunsfeld of Chicago was the architect. Cost, exclusive of equipment, \$4,500. Interiors by Wolfgang Hoffmann, interior designer, New York.

## **"House of Tomorrow"**

A circular glass house, incorporating possible indications of what the future may bring in housing has been constructed. The house is built around a central mast which contains all utilities. The exterior walls are of clear glass, and there are no windows. Privacy is obtained by drapes and roller and Venetian blinds. The most modern equipment available has been used, including everything from an airplane to electrically controlled doors. The furniture is especially designed. The ground floor includes the airplane hangar in addition to the garage; the roof above forms an extensive deck terrace, opening from the living room floor, and there is a similar deck around the drum-shaped solarium on the third floor. The ventilation is all by filtered, washed, heated or cooled air, recirculated every ten minutes. There are no visible light fixtures, as the necessary artificial light is indirect, from hidden sources. There are no closets, but movable wardrobes are used.

The house has been built by Century Homes, Inc., and the architect



was George Fred Keck, of Chicago. The house is frankly declared to be a "laboratory" house, for the purpose of determining the attitude of World's Fair visitors to the idea of an utterly different home. Future homes of the type, it is said, could be built at prices within the range of the other small houses in the group, although price has been no object in building this house. Interiors by Irene Kay Hyman, interior decorator, Chicago.

### Florida Tropical House

This is a house built to meet the requirements of people with larger means than average. It is designed for climates approximating that of Florida. There is a two-story living room overlooked by a balcony. The dining room is separate from the living room, being the



Interior, "Design for Living"



Building House of Glass

\$15,000. The striking and original interiors were designed by James S. Kuhne and Percival Goodman, Chicago and New York.

only full dining room in the group. On the ground floor also are two bedrooms and a large bathroom. A tile-paved loggia is laid on the water side of the living room, connecting with the dining room. The roof of the house is a sun deck, living deck and recreation deck, except for the space taken by the upper half of the high room. Robert Law Weed of Miami, Florida, was the architect, and the cost, exclusive of equipment, approximately

## **W. & J. Sloane House**

This house, not designed to feature building methods, but rather to display elaborate interior decoration, was built by W. & J. Sloane of New York. It has a large living room with dining bay, gallery, three bedrooms, servant's room, kitchen and terrace, offering five opportunities for exhibits of modern trends of furnishings and interior schemes. A garden at the rear is sponsored by the Garden Clubs of America.

## **The Glass Block Building**

An unusual building has been built by the Owens-Illinois Glass Company as the landscape pavilion of the James W. Owen Nurseries, landscapers of the Home & Industrial Arts Group. This is a building of glass blocks, with a central shaft fifty feet high. The glass blocks are many colored, semi-transparent, and approximately the size of the ordinary paving bricks. The colors are fired into the glass. The building houses a display of garden equipment and furniture, new and unusual flowers, and a complete display of the Owens-Illinois Glass Company.

## **Southern Cypress Manufacturers—Johns-Manville**

### **—Crane Company—Kohler—**

The Southern Cypress Manufacturers' mountain lodge is in pleasing contrast to the other modern buildings of the group. Here will be seen an interesting story of the many kinds and uses of Cypress, "the wood eternal."

The Johns-Manville building features a great mural, 90 by 20 feet, painted on asbestos-cement panels, and a colorful exhibit of products. This entire building is devoted to the interests of the family of larger means. The Crane Company bus station includes animated displays, showing the development of valves, piping, fitting, etc., to the present day of color in fixtures; with an advisory service to answer questions on bathroom planning and remodeling, while the Kohler Building to the north looks out over the Dahlia Garden with a colorful story of this firm's contribution toward the betterment of living conditions. A long colonnade with lounge chairs is surrounded by shops containing examples of bathroom furnishings.

## **Gas Industries Hall**

Adjoining Home Planning Hall, to the south, is Gas Industries Hall, with exhibits showing the growth of the gas industry, in heating and cooking, and other uses. Developments in heating, plumbing, air conditioning and household equipment and appliances are featured, with a large display by the American Gas Association.

## The Drama of Agriculture

For centuries, men farmed mainly as their fathers had farmed before them. In the last 75 years, a great change has come. It is depicted in a dramatic way in the Agricultural group, over on Northerly island, just north of the U. S. Government building. Because of its great length, this building is easily reached, either over the Twelfth Street or the Science bridge. It covers a gross area of 95,115 feet and is 658 feet long. Arthur Brown, Jr., and Edward H. Bennett were the architects. The Dairy Building immediately north covers 15,000 square feet. The same architects designed it.

### A Semi-Tropical Setting

Outside the buildings, you will see orange and lemon trees, grapefruit and other tropical and semi-tropical vegetation flourishing. It is a transplanted exhibit from Florida as a part of the state representation. One of the finest collections of its kind ever assembled, it adds a note of exotic beauty to this group of buildings.

There are roof terraces, fitted up as outdoor lounges, providing perfect vantage points for a view over the colorful lagoon, up and down the Fair.

If you already have visited the Hall of Science, you will, in a measure, be prepared for the swift sequences of the stories of farm, food, dairy, and farm machinery.

Biology has pointed the way to improve plants and animals by selection and breeding, and to adapt them to new living conditions.

Chemistry has taught us to banish or to put to good use insect life and fungus growths; to analyze the soil and enrich it. Physics has made possible larger and better cultivation by means of farm implements, power to lighten the farm tasks, and to increase profits. Meteorology tells the farmer the best times to plant and harvest. Medicine plays its part in the prevention and cure of animal diseases.

Today agriculture is a trinity—an art, a science, and an industry.

Throughout this group you see the story of foods, their production, and preservation, and their distribution told by dioramas, moving models, and actual processes. You see salt brought up from mines, and purified. You see how salt is obtained from the great flat beds near Salt Lake City. You see coffee and tea prepared; a model plant of a biscuit making factory; a great commercial kitchen, and its evolution from the primitive and old fashioned home cookeries; you see a popular drink actually made; and a miniature brewery to show how beer is made; the making of barrels for a multiplicity of purposes; how fish

are caught and canned; how sugar is processed; bees at work in a glass hive, and the preparation and uses of honey.

## Livestock and Meat Industries

The livestock and meat industries, forming one of the largest divisions of American agriculture, have combined to show you an interesting picture in the center wing of the Agriculture and Foods Building. Here



Decorative Detail, Agricultural Building

a long facade flashes and changes with colorful lights. As you enter, your attention is caught first by the figure of the lone cowboy mounted on his horse, watching his herd at a water hole in the grazing grounds. Changing lights transform the scene alternately from night to day. At the left, a large diorama shows a modern feeding farm. The sun shines and there are lush corn fields. Moving trains of livestock cars are on their way to market.

After you have seen a comparison of the

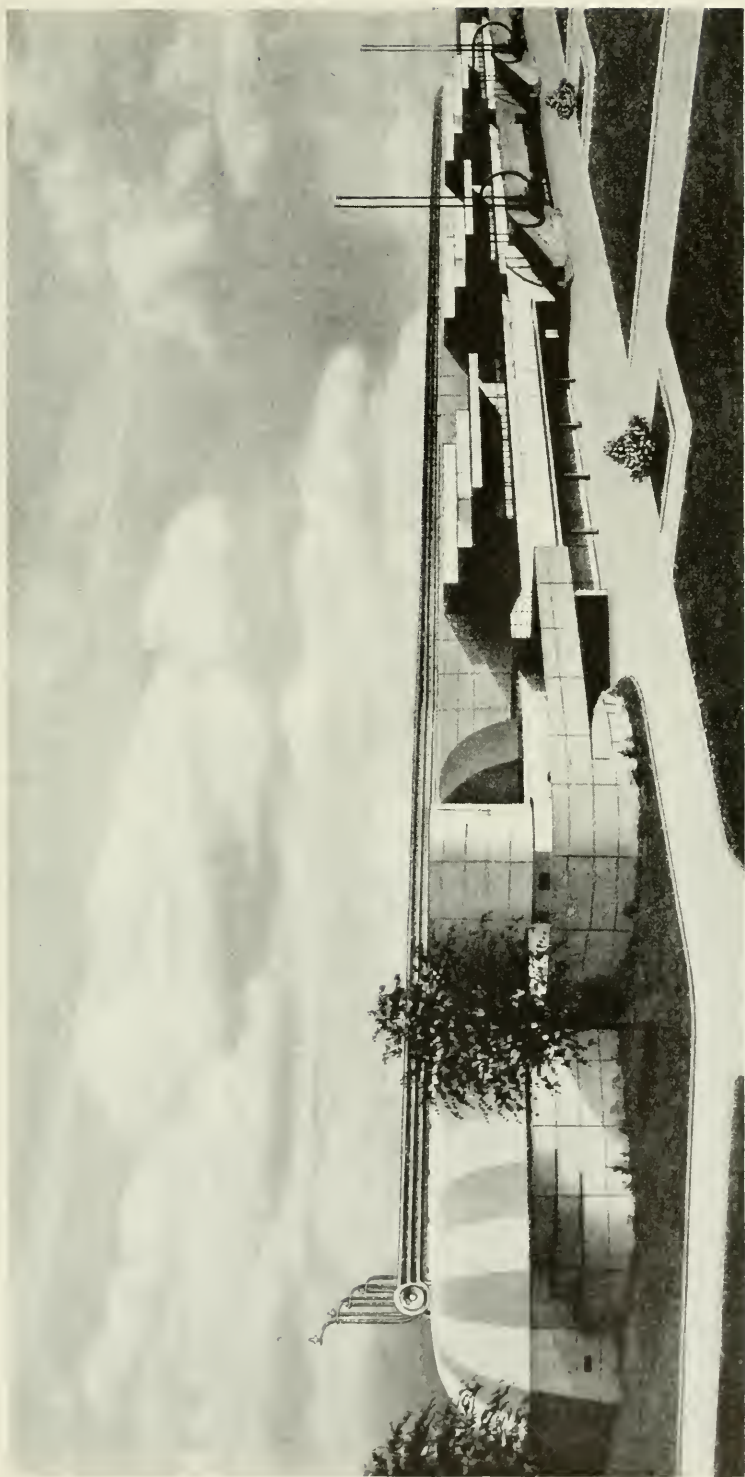
1833 and 1933 types of hogs and cattle, you enter into a white-tiled cooler to see how meat is cut and preserved. A retail store next claims you, where a robot indicates the choice cuts of meat, and gives a short talk on each. A revolving stage shows four scenes illustrating the values of meat diets. A great arch of a rainbow presents the pleasures of camping, picnicking, and boating. Startling optical illusions show the component parts of a satisfying meat meal, changing suddenly into a healthy child playing.

These highlights of the story of the livestock and meat industry are interspersed with striking depictions of the history of the two industries, the distribution of meats, and the methods taken for protecting the public in the handling of meats.

## The Illinois Agriculture Building

The State of Illinois presents a story of middle-western farming, and demonstrates the work that is carried on by the state to promote the industry, and to make life happier and more profitable for those who till the soil.





Agricultural Building

Here is also given a dynamic exhibit of one product, dwelling in obscurity for most of us, yet holding a place of such importance to agriculture and industry that it brings strikingly home the great work of science in developing a simple gift of the soil and turning it to numberless uses. The soy bean comes into its own, for here you see how science takes it, crushes it, mills it or dries it, and turns it to more than fifty uses to feed man and beast.

### **The International Harvester Building**

Go into the International Harvester building and you will see the quarter million dollar exhibit of the machines and implements which science and industry have devised to lighten drudgery.

### **The Dairy Building and the Color Organ**

If you begin your trip to the Agricultural group from the north rather than the south end, the sweeping main entrance of this big building is only a few steps from the north, or Twelfth Street bridge. You enter into a large lobby. Beyond is a cyclorama on which streams of color play, flowing over it in masses or in subtle shadings or clashes of startling contrasts. At an organ console, a player's hands finger the keyboard, causing the variations of color. The instrument is the Clavilux, or color organ, designed to play with color as musical instruments play with sounds.

With the "color music" for accompaniment, a spectacle is presented in the darkened amphitheatre in several episodes, showing how, in one



**The Dairy Building**



**The Poultry Show**

of civilization westward, and today's organized dairy industry with its showing the bringing of the first cows to the Plymouth colony, the trek of civilization westward, and today's organized dairy industry with its scientific preparation, distribution, sanitation, and refrigeration of milk and milk products.

After eight minutes of the pageant drama, wide halls brilliantly illuminated and containing artistic scenes invite you into Industry Hall. Transparent figure groups show the four ages of humanity—Childhood, Youth, Prime, and Maturity—and the effect of dairy products' diet on the physical and mental powers. A mechanical reproduction of a cow shows the animal as a chemical laboratory, manufacturing milk.

You enter Commodity Hall, and witness the preparation of ice cream, cheese, butter, milk, and dry milks. An illustrated exhibit permits you to follow milk from the country receiving station to the refrigerated tank car, to the receiving tank at the city milk plant, through the processes in the plant, and to the delivering wagon.

A dairy restaurant overlooks the lagoon. Next to the restaurant on the same level are club rooms for members of the Century Dairy Club. The members are contributors to the dairy exhibition, which was produced by Century Dairy Exhibit, Inc., with Dr. H. E. Van Norman, manager and president.

### **A Poultry Show**

Near the Thirty-seventh Street entrance there is a poultry show, with an international egg-laying derby as the principal feature, champion hens from twenty-eight States, from the Dominion of Canada, and four other nations, competing. The egg-laying contest started a month before the Fair opened, and will be ended two days before its close. Besides the egg-laying contest, there is an exhibition of specimen flocks of unusual varieties of domestic, and wild, land, and water fowl.

## **A Fairyland of Flowers**

Transformation of 424 acres of barren, sandy, man-made land—wrested from the bottom of Lake Michigan—into a garden spot of velvety lawns, hundreds of trees, shrubbery and brilliant flower-beds was the task confronting landscape engineers and horticulturists at Chicago's 1933 World's Fair.

The problem of landscaping confronting Messrs. Vitale and Geiffert, the landscape architects, could not be too carefully studied, for it is the landscaping which forms the setting of the Fair. Not only do the trees, terraces, hedges and gardens decorate and beautify each individual building, but they have been placed and designed so as to weld the entire exposition area into a complete and harmonious unit. Type of tree, shape of pool, variety of flower, height of hedge and terrace, massing of shrubbery, have all been carefully and subtly adapted to the type and architecture of the particular building which it decorates, so that each spot has its own unique place in the carefully designed pattern of the entire area.

One of the first tasks was the transplanting of hundreds of trees. All of these trees, except the cedars, came from Illinois, and Fair visitors will be refreshed by the shade of avenues and clumps of maples, elms, lindens, horsechestnuts and lombardy poplars. There will be twenty acres of smooth, hedge-bordered lawn studded with green and flowering shrubs; and the delicate tracing of young vines will add to the charm of many of the walls of the buildings.

Probably the most spectacular part of the landscape effects will be the flowers. Twenty-four thousand square feet of flower beds will be scattered about the grounds, planted in a fragrant and colorful profusion of heliotrope, geranium, marigold, petunia, snow-on-the-mountain, salvia, begonia, dusty miller, and ageratum.

### **An Avenue of Color**

Stroll from the Hall of Science southward to the Hall of Religion through an "avenue of color," a walk 1,000 feet long. Its bordering flowers are three kinds of gladiola, early, middle and late. At either approach of the Sixteenth Street bridge will be another colorful display of gladiola.

### **Dahlia and Peony Gardens**

On southward, the landscaping surrounding the Home and Industrial Arts group, with Dahlia gardens, flaunting their riotous color, may allure you, and the enormous peony beds will make a spot of soft bloom near the Lincoln group.





Cloistered Beauty—Cypresses and the Carillon, Hall of Science

## Alpine Gardens

Just south of the Twenty-third Street entrance are the Alpine Gardens, a half acre in area, with wide paths and terraces, and shade trees and evergreens. From the upper terraces water cascades down to a pool at the bottom, in which water lilies float, and goldfish besport them-

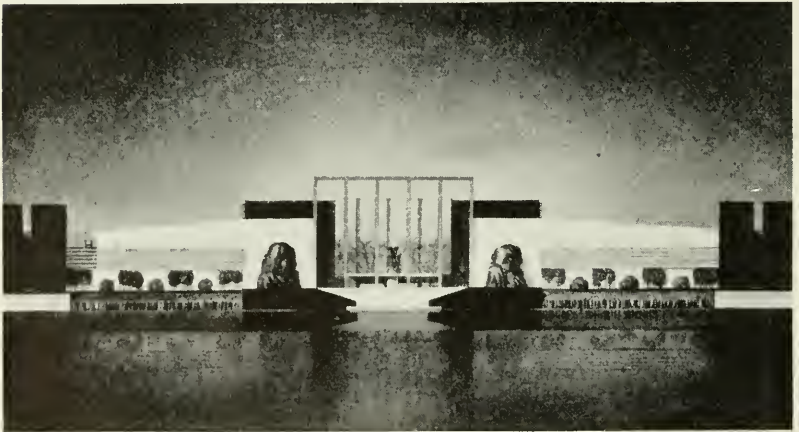


**The Alpine Garden**

selves. The rock ledges are formed of beautiful weathered stone, and there are restful garden seats where you may sit and watch the kaleidoscopic scene of the Fair. Rare plants gathered from abroad can be enjoyed, such as the flowering onion of Thibet, the Cupid's dart from Greece, many varieties of lilies from China and Japan, a sedum from Russia and an exceptionally rare fall flowering crocus.

## Tribute to Cermak

In a special place of its own there's a little garden of twenty-five rose bushes, memorial to Anton J. Cermak, martyred mayor of Chicago. Shortly before the shot of an assassin, intended for President Franklin D. Roosevelt, at Miami, Fla., so wounded Mr. Cermak that he died a few days later, Jan Bohn, noted horticulturist of Blatna, Czechoslovakia, boyhood friend of the late mayor, had christened one of his newest rose creations the Anton Cermak. Their friendship had been renewed when the mayor visited his native country, on a tour of Europe in the interest of the Fair. It was intended to have a bed of this variety planted on the World's Fair



**The Horticulture Building**



**Crimson and White Cosmos**

grounds in honor of the living mayor —after his tragic death, the memorial garden was decided on.

Here again is a garden of prairie flowers, forming a dooryard for a Lincoln log cabin. Here are California blooms, with a background of mountains and a California mission house, and a brook babbling a soothing course through a forest preserve garden, with shaded footpaths and rustic bridges.

### **Northerly Island**

Crossing the bridge to Northerly island, the splendor of gardens and foliage continues. Whether it is the formal simplicity of shaded and hedge-bordered pool and paths of the courts of the Electrical and the Agriculture buildings, the Italian garden flanked by a row of prim tall trees, or the great garden of roses, your eyes will be delighted by the quiet and charm of these spots.

### **Within the Horticultural Building**

You will have seen dioramas in many exhibits throughout the Fair, but in the Horticultural building, a concession to which an admission fee is charged, are different ones. Gardeners and florists have used real trees, real flowers, real brooks, to present scene after scene in dioramic settings. The first you will encounter as you enter the hall is a tropical scene, with tall trees, and a tangle of vines and vivid flowers. Another is a colonial home, and about it real moss, lilies of the valley and spacious lawns. Here is a southwest desert, with forbidding cactus abounding, and Joshua trees. Another is an Italian lake, rimmed by trees, and with flowers in front. Others are a winter scene in the Michigan woods, with cold winds blowing their chilly breaths upon great trees, a formal rose garden; a sixteenth century interior, with cunning flower arrangements, and through the windows an old fashioned garden is glimpsed.

Concealed skylights flood the flowers with sunshine, or, when needed, the blossoms are bathed in ultraviolet rays, from lamps.

## The Hall of Religion

Near the Twenty-third Street entrance, and north of the Midway, or street of carnival, stands a unique building. It strives to express the spirit of modernism, that is the voice of the Fair, and the more mellow, more traditional spirit of holy things.

Its tower-carillon chimes religious melodies, and within is a chamber of quiet, a chapel of meditation and prayer. It is the Hall of Religion. Here, the followers of many faiths tell the story of man's rise through



The Chalice of Antioch

religion. Jew and Gentile, Baptist and Methodist, Presbyterian and Lutheran, Christian Scientist and Episcopalian, join in a solemn manifestation of the supremacy of God.

### The Chalice of Antioch

Here you can see one of the rarest relics of Christianity; the silver Chalice of Antioch. Only once, since being brought to America 19 years ago, has it left the sanctuary of a strong box in New York. Then it was lent to the Musée du Louvre in Paris. Its value is inestimable and it is heavily insured. Archeologists, biblical scholars, writers and artists who have studied this chalice pronounce it to be the earliest known object connected with the Eucharist.



The chalice was found in Antioch, Syria, by Arabs digging in the ruins of what once had been a great city. With it were other religious pieces also shown in this exhibit. The chalice stands 7.56 inches high and would hold about two quarts of liquid. That it was made by a very great artist, all eminent students agree. He has presented in beautifully sculptured figures two scenes of the Christ, each surrounded by five of his followers. One shows Jesus as a mature, yet young man, beardless, dignified, clothed in a toga. Below him, are Paul and Peter; above, at left and right, are James and Thaddeus. Behind Paul is an old wrinkled man, St. Andrew, brother of John.

The other group shows Jesus as a boy holding in his hand the scroll of the law on two staffs. Matthew, Mark, Luke and John sit around him, and behind Matthew is St. James the Greater, brother of John.

According to orientalists the chalice is truly representative, in design and decoration, of the golden age of Hellenic art, and probably the last example extant.

### **All Religions are Represented**

The Hall of Religion commands a beautiful view of the Lagoon. It stands on a curve in the shore-line that gives it prominence in this section of the grounds. The architects were Thielbar and Fugard, and it represents the fulfillment of a dream of George W. Dixon, Chicago business man, and many of his associates to tell the story at A Century of Progress of the advancement of mankind through religion. Six rare, stained glass windows by Cormick of Boston, were borrowed from the great Milan cathedral being built in Pittsburgh.

This building is entered through a door of ecclesiastical design, over which are the words, "Righteousness Exalteth a Nation." You walk into an octagonal rotunda, the walls of which are adorned with illuminated murals. These murals represent the world's best known religions—man's universal aspiration for God—Christianity, Buddhism, Confucianism, Mohammedanism, Judaism, the early American Indian's worship of the Great Spirit, the ancient Persian and Grecian faiths.

### **Churches Cooperate**

To your left, from the main lobby, or rotunda, is an exhibit of the American Bible Society, and to the right are exhibits by the Christian Century Press, and the Protestant Episcopal Church of America. A 300-foot exhibition hall houses exhibits of the National Lutheran Council, and the Lutheran Synod of Missouri, the Church of Christ, Scientist, the King's Daughters. Another exhibit hall holds a unified exposition of the Methodist, Presbyterian, Congregational, Baptist and other Protestant churches.

### **Religious Welfare Organizations**

The Salvation Army, Jewish Societies, Near East Foundations, Church of Latter Day Saints, and the Volunteers of America have interesting exhibits. They join in telling "the services which religion has recorded in the past century, and the continuing service which the next

century may be expected to open to religious bodies." Particular stress in the exhibits is laid on the advancement of religious organizations in hospital and mission work.

One of the most striking exhibits is an international one, showing the development of church architecture.

### **Organ Recitals and Choral Concerts**

A large assembly hall affords a place for religious pageants and dramas, organ recitals, choral concerts and other group activities. It is anticipated that, throughout the Fair, some of the nation's greatest organists will give frequent concerts, to be transmitted through loud speakers for the benefit of those who may sit upon the broad fountain terrace at the east of the building. The carillon chimes also will be broadcast.

In the "Chapel of Meditation" there are pews, an altar, chancel, and pipe organ. Here it was the purpose of the builders to provide a place where people of all faiths may find quiet communion.

### **An Interesting Chapel Car**

On a track near the Skyride, north of Sixteenth street, you may enter a chapel car of the Catholic Extension Society, one of two pioneers



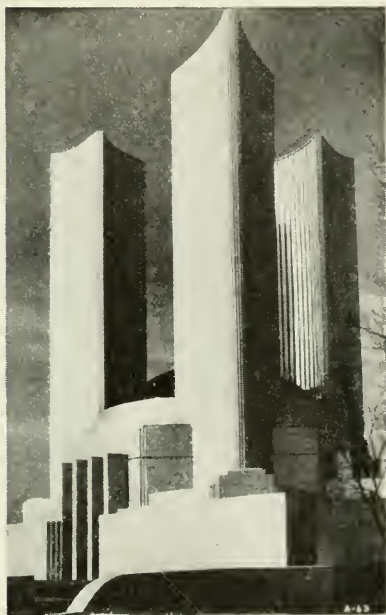
**The Chapel Car St. Paul**

of that service. It is a car which has traveled thousands of miles in the Christian cause, and it contains more than 300 interesting exhibits.

Just south of the General Exhibits group, across the way, is the Christian Science Monitor Building, with a reading room.

# The United States Government

## And the States



The Federal Building

Where the north Lagoon curves around at Science Bridge, a three-pylon building stands on Northerly island, chromatic yet stately. Above its gold dome three pylons, fluted towers 150 feet high, typify the three branches of United States Government—legislative, executive and judicial. This is the building for which Congress made appropriation to house, develop and maintain the story of Government activities—a story which might be said to be the crowning chapter of the story of science, and its application by industry to the welfare of the people, which A Century of Progress tells.

On the west front of the building a plaza extends to the lagoon, and a 40-foot span to an embarcadero used by dignitaries of state to disembark for a visit to the building.

At its back, and in V-shape seeming to embrace it, is the States Building, with its Court of States, thus typifying the increased feeling of loyalty of the citizens to the Union.

The United States Government Building is 620 feet long and 300

feet wide, and you enter it into a rotunda 70 feet in diameter. Over it is a 75-foot dome.

About the building are sunken gardens which fill the open part of the "V," forming the Court of States.

Many are the contributions which the Government makes to enunciate the theme of the Fair in the exhibits you will find in its beautiful building. Ten departments of the Government tell of their activities and achievements—Agriculture, Commerce, State, Interior, Navy, Labor, Treasury, War, Justice and Post Office. Also there are extensive exhibits of the Smithsonian Institution, the Panama Canal, the Library of Congress, the National Capital Park and Planning Commission, Veterans' Administration, the National Advisory Committee for Aeronautics, the Shipping Board and the Government Printing Office.

Completing the story which you may already have seen in the Agricultural Building, the exhibit of the Department of Agriculture gives you a dramatic presentation of the history of farming in the last one hundred years, and of the vast improvements in the science of Agriculture that have had incalculable effect upon the economic, and the social life of both urban and rural communities. You see how improvements in engineering methods, and in the use of machinery, and in the gathering and dissemination of market information, and the continuous aid of the Government in all phases of agricultural life have helped to bring farming and stock raising to a science.

The analysis of business trends, the grading and inspection service, the land surveys and other functions of this great department of the Government are shown.

## **The Business of the Nation**

The business of the nation in its every phase looks to another Department of the Government—the Department of Commerce—for a multiplicity of service. This department shows the work of the Aeronautics Branch, the Bureau of Standards, Census Bureau, the Bureau of Foreign and Domestic Commerce, the Bureau of Fisheries, the Bureau of Lighthouses, the Coast and Geodetic Survey, the Patent Office, the Navigation and Steamboat Inspection Service and the Bureau of Mines.

Among the exhibits of the Aeronautics Branch one will see a radio receiving set for the reception of broadcasts of weather information from Department of Commerce stations by aircraft in flight. There will be acetylene blinkers, electric code beacons and a 36 inch rotating beacon light. The Bureau of Lighthouses will show further examples of the progress in lighting and the latest development in lighthouse practices.

The Bureau of Mines is contributing a series of murals depicting various mining and metallurgical operations; a working model of the Bureau of Mines experimental mining station, a model of a helium plant, and demonstrations of rescue methods used by mine firemen and police. There will also be a mine rescue car which will be shown on



one of the tracks immediately adjacent to the Travel and Transport building.

The exhibit of the Bureau of Foreign and Domestic Commerce will present interesting information on government cooperation with and service to, the domestic and foreign trade. There will be a large map of the United States which will show in sequence the average value of textile products, shoes, leather, iron and steel, foodstuffs, chemicals, and other merchandise exported from the United States per day over a ten-year period (1923 to 1933).

The exhibit of the Department of State is in two sections, that of the Department proper and that of the Foreign Service. A collection of



The Hall of the States and the Federal Building (Photo by Mario Scaccheri)

historic documents is one of the interesting features — documents in which are written vivid accounts of a Nation's growth.

The Foreign Service brings home to the American citizen the far-flung influences of his government, that, concomitant with the growth of the Nation, has reached into every nook and corner of the world.

### **Bristling Guns and Dramatic Souvenirs**

Here in the south wing of the building you find hundreds of souvenirs from all over the world, treasured relics of the Navy and the Marines. Oil paintings and dioramas remind us that we have not reached national greatness without the sacrifices of conflict. Paintings of battle scenes, of many campaigns, and pictures of peace-time exploits; uniforms worn by Uncle Sam's warriors in the War of 1812, in the Civil War, the Spanish-American conflict and the World War; battle flags; a machine gun taken from a German plane shot down by the Marines at Theau-cort; a vast enclosed case with medals and citations.

Here is a torpedo, more than 10 feet in length, and weighing several tons, and a diorama of an extensive mine area laid out by the Navy in the World War. Also marine engines that index the development of our battle fleets, from the time of the *Merrimac* and the *Monitor* to the powerful turbines of today.

The Army is depicted in real life in its camp within the Exposition grounds. The only Army exhibit in the Government building is that of the engineers illustrating methods of construction covering river and harbor improvements, Mississippi flood control, the Wilson Dam, and the Nicaragua Canal survey.

The Treasury Department shows special exhibits from the Bureau of the Mint, the Bureau of Engraving and Printing, the Bureau of Narcotics and the Public Health Service. The last named has exhibits admirably complimenting the Medical exhibits in the Hall of Science.

The Department of Labor shows what the Government has done in the last one hundred years to improve the conditions and standards of labor, and of its contributions to child welfare.

The central feature of the exhibit is a pyramid of frosted glass which has thirteen tiers, the lowest representing the years immediately preceding 1933, the next seven representing the past century, and the topmost the future. The road which circles upward around the pyramid is symbolic of the progress which mankind has made during the century. As a decorative screen opens and reveals this pyramid, a group of figures emerges and begins its long and tedious climb upward into a more enlightened era.

A large reception room, a model kitchen, a pantry and caterers' quarters are in the building for the use of the United States officials. The Hon. Harry S. New is Commissioner and Col. W. B. Causey is the Assistant Commissioner. The Secretaries of State, Agriculture, and Commerce form the Commission.

## The Parade of States

The feeling in previous expositions has been that national participation could be shown only by a separate building for each State. This resulted in some useless expenditure, and participation on an elaborate scale by some, by a scanty representation by others, and by no participation at all in the case of many.

Preferring to emphasize the solidarity of our Union, A Century of Progress determined that the States should be grouped under one roof, architecturally arranged with the Federal Building to indicate its support of, and united efforts with, the central government. Your feet will probably turn first toward your native commonwealth, but you will want to visit all. Here is the gathering place of the nation, here friends from different states will meet, or native sons and daughters congregate. It is a beautiful setting for reunion, overlooking the lagoon, with its broad and beautiful Court of States opening by several entrances to the various state and territorial exhibits.

It is a parade of products, beautiful scenery, state flags—a striking procession that tells a great country's history and inexhaustible natural resources.

Puerto Rico has an interesting exhibit in the building; Alaska has a cabin in the rear.

At the western end of the left line of the V-design formed by the States building, looking east, Wisconsin starts the parade, with an exhibition of her agriculture, her industries, and scenic attractions of forest, lakes and streams that appeal to the camper, the hunter, and the tourist. Then comes Puerto Rico, situated on the warm waters of the Caribbean, with exhibits that tell of her beauty, her sugar, coffee and tobacco industry, and scenic, tropical attractions.

Illinois follows, with her exhibit divided into four sections: Mines and Minerals, Public Welfare, Public Works and Waterways, and the State University, which tell of the advancement which Illinois has made in the 146 years since she became a territory, more particularly in the last century. Illinois also has an agricultural exhibit in the Agricultural building and a Host building on the Avenue of Flags, described elsewhere.

New York has a beautiful garden in her section. Her exhibit tells the story of the great resources with the diverse beauties and recreational features of the Empire State, including the Catskills, Adirondacks, Niagara Falls and State Parks.

Iowa—the Great Corn State—displays recreational opportunities and State Parks.

Washington brings her story of rich mines, agriculture, the natural scenic beauties of Puget Sound, Mount Rainier and the Inland Empire in pictures framed in native woods.

Ohio swings into line with her story of great manufacturing achieve-

ment and beautiful farms. A large map of the state with an electrical control board is one of the features.

Then comes North Dakota picturing her agricultural resources, her growing industries, and the scenic beauty of the Bad Lands, with an exhibit showing how lignite coal is mined, how briquettes are made; her tile, brick, bentonite and pottery—all North Dakota products, are shown.

Georgia carries the southern banner into the procession, with cotton, corn, tobacco, watermelons, peaches; her marble, timber resources; even gold mining being represented.

California's grove of giant redwoods marches next, the vistas showing dioramas, murals, colored slides and transparencies, a colorful display of taxidermized fish, corals, and shells from Catalina, and, as special features, a miniature \$50,000 model of San Francisco, and Los Angeles' beautiful sixteen-foot diorama, with a most attractive floral and sub-tropical fruits display.

Indiana follows with a beautiful mural extending around the entire space; a state map showing roads, resources, historical subjects, and State Parks. There is a reception room where paintings by local artists are shown, and outside a beautiful formal garden with statuary.

Minnesota comes with a contrasting garden representing the source of the Father of Waters; her exhibits tell of the North Woods, Ten Thousand Lakes and her great industries.

Texas, which has existed under six flags in her tempestuous history, offers a display of her near-tropical plants and trees of the lower Rio



**Illinois Host Building**



Grande, and other exhibits which show her wide range of agriculture, industry and natural resources.

Missouri next relates her story of varied industries, the playground of the Lake of the Ozarks, one of our largest artificial lakes, in picture and cyclorama.

South Dakota presents an exhibit of mining and agriculture and a model of Mount Rushmore, where Gutzum Borglum is carving the likenesses of George Washington, Abraham Lincoln, and Theodore Roosevelt on the mountain side.

Mississippi has devoted its space to the demonstration of her agriculture, industries, raw materials, power, health, recreation and education.

Michigan is stressing her tourist facilities, with a hall in which a temperature of 64 degrees is maintained. A picturesque waterfall leaps over a rocky precipice into a deep woodland pool in which Michigan trout swim about.

Colorado brings an elaborate display of her vast richness in mining, agriculture and industry; her scenic beauties, framed by a reception room in modernistic decoration.

Florida has four exhibits—among her sister states, a colorful patio of a Florida residence, surmounted by a sky of varying daily tints. In the center plays a fountain. Sculptures, murals, dioramas and glassed-in exhibits tell of her farm and industrial life, supplemented by a garden of exotic plants and trees; on the lagoon shore the state has planted a citrus grove of orange and other semi-tropical fruits; on the lagoon floats a spongeboat from the Greek colony at Tarpon Springs, where the divers plunge beneath the waters for sponges planted in the lagoon; in the Home and Industrial Arts area is a Florida home, built largely of materials native to the State.

## **The Illinois Host Building**

On the Avenue of Flags, south and across the way from the Administration building, the silver and gold Illinois Host building offers its welcome to all the world. Its 70-foot tower surmounts a structure arranged for the specific purpose of hospitality. Within is an auditorium with a stage, spacious lounges, and rest rooms.

Here are headquarters for Governor Henry Horner of Illinois, chairman of the Illinois Commission, and Louis L. Emmerson, vice-chairman and former governor, and members of the commission. They extend the welcome of the State to visitors from far and near.

## **A Lincoln Shrine**

Three rooms of the Host Building are devoted to an unusual showing of the life of Abraham Lincoln, great citizen of Illinois. There is a reproduction of the living room of the Lincoln home in Springfield, and a replica of the famous Lincoln statue by Lorado Taft. Fine relics from private collections, including those of Governor Horner, Illinois State Historical Society, and Oliver R. Barrett, of Chicago, are shown.

## Foreign Participation

The true international character of the Exposition is indicated by the dramatic and exotic displays from foreign nations.

In response to the invitation of the United States many nations are participating officially while others are represented by some phase of their industrial, social, or cultural life.

### Colorful Italy

Symbolically prophetic of the flight of 24 Italian planes, under command of General Balbo, leaving Rome in June for Chicago, Italy's building stands at the extreme southern end of the Avenue of Flags in the shape of a giant airplane. With her 450 exhibits, she will tell a dramatic story of her remarkable achievements in engineering, physics, medicine, geography, astronomy, agriculture, shipping and aviation from the times of the Caesars to the present day. The great engineering feat of draining the Ostian marshes and the reclamation of valuable land for agriculture and port development will be a part in these displays.

The Italian exhibits occupy space not only in the national pavilion, but have spread themselves into the upper left wing of the Hall of Science, into the Adler Planetarium, and even overflow into the Museum of Science and Industry in Jackson Park. After the conclusion of the Exposition the Italian government has generously donated the entire display to the Rosenwald Museum.

### The British Empire

On the railroad tracks near the Travel and Transport building, one of the world's most distinguished trains, the British "Royal Scot," will be shown.

The Irish Free State has a prominent exhibit inside the same building where you will find a delightful display of fine linen, laces, cloth, rugs, and paintings by Irish artists.

Within the Travel and Transport building Palestine is represented by tourist displays.

In the south third of the great hall of the Travel and Transport building will be found the Canadian exhibit—a huge airplane view of the country, 130 feet in length, and below it a display of the products of Canada, and an alluring travel story, told with dioramas and transparencies, picturing Canada's many unusual tourist attractions and her flora and fauna. Included in this exhibit are large and accurate ship models of the Canadian Pacific, and Canadian National Steamship companies.

## The Republic of Mexico

On tracks near the Travel and Transport building is the palatial Presidential train from Mexico with the marvelous collection of the Monte Alban jewels.

## Denmark and Norway

Denmark has exhibits in the Hall of Science, near those of Italy, which contribute to the telling of the story of the basic sciences. Norway sends her training ship, *Sorlandet*, a three-masted barque of 577 gross tons. She is accompanied by Capt. Magnus Anderson, who was in command of the ship which Norway sent to the Fair in 1893. The *Sorlandet* is moored at the southern tip of Northerly island.

## The Grand Duchy of Luxemburg

The Grand Duchy of Luxemburg which lies surrounded by France, Germany, and Belgium in northwest Europe, is represented by an elaborate tourist exhibit, in the Travel and Transport building.

## The Chinese Village

At Sixteenth street just south of the Bendix Lama Temple you will see the replica of a walled village from China. Occupying its own shrine, is a carved jade representation of a Chinese temple of seven stories, standing 50 inches high. It took 18 years and a small army of artists to achieve this very beautiful work of art. The exhibits themselves are a veritable treasure house of porcelain, lacquer wear, silks, embroideries, rugs, furs, carved ivories and furniture.

The Chinese silk industry will play an important part in the industrial section. An exhibit of surpassing interest is that of specimens from the cave deposits near Peiping, where was found the Pekin man who lived 500,000 to a million years ago. Interesting relics of the expedition which discovered the Pekin man will accompany this display.

Entertainment is furnished by the finest troupe of acrobats that has ever left China and there will be dramatic interpretations by leading Chinese actors and actresses.

## Japan Nearby

Japan has brought over a typical example of her architecture—a two-story building immediately west of the Chinese village. An army of workmen and engineers came over from Japan bringing their own tools and materials to construct the building. Here are housed fine examples of Japanese china, cloisonne, embroideries, silk work and countless examples of the world-famous Japanese handicraft.

A typical Japanese tea garden is one of the features of this unusual Oriental display. The charming ceremony of tea drinking as practiced in Japan is added to by dainty Geisha girls with all the atmosphere and colour which only Nippon can give. The process of making silk from the cocoon to the finished article is shown by experts in this industry.

The resulting development of the surrounding country, due to the construction of the South Manchurian railway, will represent the more serious industrial and engineering genius of the Japanese nation.

### **Czechoslovakian Pavilion**

Czechoslovakia has a building across from that of Italy, housing a gorgeous display of products of its varied industries, colorful and gay, and showing you something of the life of this industrious nation.

### **Dominican Republic**

The Dominican Republic has a model of the Columbus Memorial lighthouse, the tribute to the discoverer of America, who was cast into jail there for several years. You will find it on Northerly island, near the Electrical building.

### **Sweden Shows Revived Industry**

Near Sixteenth street, also, is the Swedish pavilion, with an unique architecture, "just two boxes," someone called it, in which is displayed an exhibit of modern applied art and containing a marvelous collection of rugs, draperies, shawls, and upholstery cloths, and beautiful glassware from the famous factory at Orrefors. This exhibit exemplifies a striking example of the revival of home industries under the lash of economic necessity. The exhibits here will bring delight to those who are interested in the application of modern design to home decoration.

### **Moroccan Village**

In the same area is the Moroccan village consisting of typical "Souk" or arcade of shops with muezzin's tower dominating the whole. The streets are paraded by typical Moors in costume, while camels pad their way through this wonderful reproduction of Northern Africa. All the color and allure of Morocco appears in the shops selling barbaric jewels, leather goods, carpets, rugs, camel cloths, and perfumes.

### **Egyptian Pavilion**

Immediately south of the Horticultural building is found the Egyptian pavilion, a replica of typical Pharaonic architecture approached by an avenue of sphinxes. The development of the country under the autonomic government which Egypt has recently gained will play a prominent part in the exhibits.

The wonderful tourist attractions, already so well known, have their place, while archeological discoveries are not neglected.

### **Foreign Scientific Displays**

Exhibits on medicine in the Hall of Science will have contributions from many foreign institutions, including in addition to those from Italy and Denmark, displays by the Pasteur Institute of France, the Robert Koch Institute of Berlin, the Deutsches Museum of Dresden, and the Wellcome Research Institute of London.



## Industry in Fascinating Phases

Industry and its enterprises permeate A Century of Progress as do light and color, and the spirit of carnival.

New notes—innovation—colorful and varied expression. Static exhibits always in minority; living, thrilling, moving demonstrations everywhere dominant.

Thousands of exhibits are to be found in miles of exhibit halls, virtually all telling an item, or a page, of a connected story of the voice of science, speaking in terms of achievement.

Just below the Hall of Science is the General Exhibits Group, devoted entirely to industries. In its five pavilions, designed by Harvey Wiley Corbett, and stretching southward like a fluted section of colorful scenic canvas, appear as wide a variety of products as could be imagined. Many are shown in the making, all displayed in unusual ways, ranging from coal to fine gowns.

Enter pavilion No. 1, and a striking display of the steel industry greets you. A mammoth mural details the uses of steel. There are oil derricks, and small steel houses, and the model of a hundred-story building. At one side a ladle pours, at intervals, molten steel—a startling simulation effected by cunning lighting. Nearby is told, by means of five scenes, the step-by-step process of making steel. Farther along sheet metal steel work is exhibited.



Decorative Detail, General Exhibits Group

### Stories of Oil

Next door to the steel companies, the story of oil is told. A large sunken map of oil field territory, ingeniously lighted, indicates the distribution from many cylinders, and from a funnel shaped container, through numerous spouts, to a vast area of consumers. A miniature



**The Gutenberg Press**

refinery gives an interesting picture, and two great cutaway engine cylinders show the process of oil lubrication. Here also is a modern airplane cockpit in which you may sit and capture the sensation of steering a plane.

### **The Graphic Arts**

Graphic arts come into their own in the second pavilion. From the Gutenberg museum in Mainz, Germany, has come the rare Gutenberg press, on which Johannes Gutenberg printed many of his books. With it is a copy of the famed original Gutenberg bible, valued at more than \$100,000.

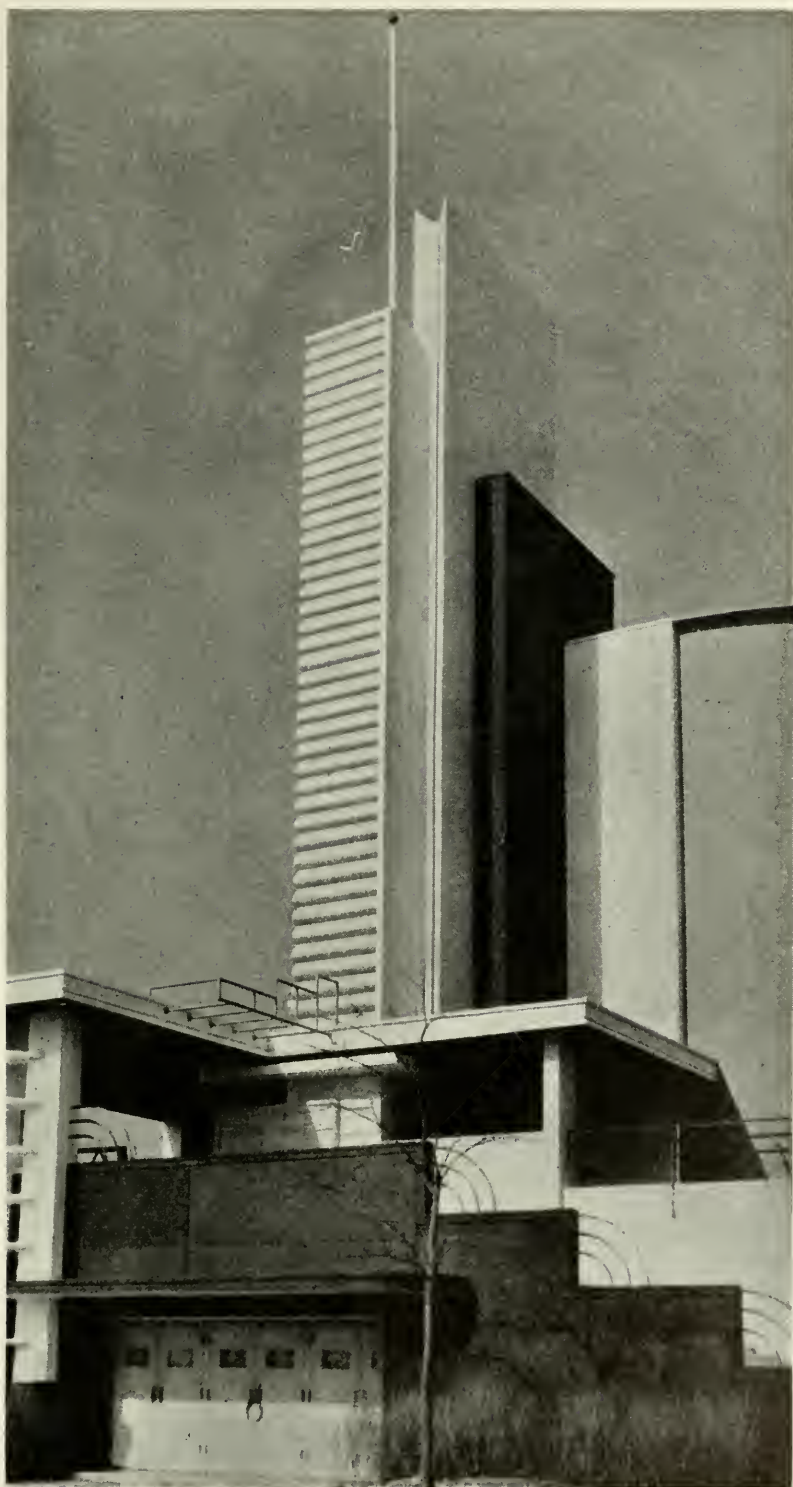
In a foundry, workmen dressed in costumes of the days of Gutenberg cast type as souvenirs.

Miniature working models demonstrate the extensive and intricate problems of printing, engraving, and paper making, and you see the processes by which materials are turned into newspapers and magazines.

The evolution of these arts from the day of Gutenberg to the present use of giant high-speed, multi-color presses, is graphically portrayed with many types of presses in action. An extensive display of work done by modern methods stands witness of a hundred years of progress in this means of communicating information.

### **Display of Office Equipment**

In Pavilion No. 3 you may see the development of business efficiency, manifested in the small corner store as well as in the mammoth factory, as it is exemplified in the office equipment which the necessities of busi-



A Pavilion of the General Exhibits Group

ness, growing constantly more complex, has demanded. Here you will see modern types of furniture, manufactured to meet the needs of economy in time and money. Machines that have replaced the old grocery store "till" to make the small business man, and the farmer, for that matter, in a measure an efficiency expert, can be seen. You find here the evolution of business methods throughout the nation told in historical displays. You see the most modern of cash registers, teletyping machines, calculating machines of ingenious design, but easy to use, comptometers, and other examples of man's inventive genius in solving the problems of a complex mechanical civilization. If you wish to operate these machines, provisions will be made for you to do, so that you may become familiar with their intricacies.

### **The Great Nassak Diamond**

In Pavilion No. 4 is a spectacular exhibit of the combined international diamond industries. Included in this magnificent display is the famous Nassak diamond, once the right eye of the God Siva, in a temple at Nassak India. The diamond is valued at \$500,000. Other diamonds with a value of a million dollars more can be seen, too.

The great diamond is guarded by amazingly elaborate means. It reposes in a cabinet of inch-thick glass, above a drill-proof safe. The top of the safe folds back, permitting the cushion on which the famous gem rests, to rise for display. But, should the glass be struck, even though not broken, an "electric eye" would cause the diamond to sink swiftly into the safe, and the safe close. Tear gas would flood the enclosure, and guards with gas masks, always nearby, would rush to the spot, and would seize the thief before he could get away. At the same instant,



**The General Exhibits Group** (Photo copyright Kaufmann & Fabry)



alarms would sound in a detective's room, where men wait constantly to bring reinforcements.

The Nassak diamond was first seen by white men in the Twelfth century. In the Eighteenth century the Siva Temple was looted and the diamond carried to London. It originally weighed eighty-five carats, but by cutting it has been reduced to  $78\frac{5}{8}$  carats. It is a flawless, blue-white stone, said to be the finest diamond outside crown jewel collections.

You see a diamond mine in operation, a native Kaffir krall where the workers live, and diamond cutters at work.

## **An African Diamond Mine**

At the mine mouth is a 36-foot elevator scaffold to lower the African laborers, stripped to breech clouts, to the tunnel below the level of the lake. You can go down into the tunnel, twelve feet below the floor, and see Kaffir and Zulu laborers drilling and digging in the "blue ground" where diamonds are found. Fifteen tons of this "blue ground," containing more than 3,000 carats of "raw" diamonds, were brought from Kimberley, South Africa, for this display. Two diamond mine engineers are in charge, as the tunnel had to be lighted, timbered and piped, exactly as in the real mines.

The rock is hoisted from the mine, and run over agitator tables, in semi-liquefied form. Vaseline grease "catches" the diamonds, while the lighter earth is washed on. Then the tables are scraped, and the grease melted in wire mesh baskets in kettles; the rough diamonds remain in the baskets. After that they are sorted, the flawed and discolored stones segregated for industrial uses, and the pure stones for jewelry sales. You see, nearby, the grinding, cutting, and polishing processes.

The mine is a gift of the diamond mining industry to Chicago, and at the conclusion of the World's Fair it will be transported bodily to the Museum of Science and Industry.

In addition to the diamond mine are many brilliant and interesting displays representing various phases of the jewelry industry.

The main feature of one of the large watch exhibits shows how the correct time is recorded from the stars and how that time is used in regulating watches.

## **Shirts in the Making**

You may watch shirts made, by thirty, high-speed machines, in Pavilion No. 5, and can see a diorama showing the method of pre-shrinking, known as the Sanforizing process given to all cotton materials before manufacture.

The tooth paste industry shows the manufacture of tooth paste from the preliminary steps through the many different stages to the lacquering and baking of the enamel on the finished tube. The hosiery exhibits have in operation, actual machines showing the minute mechanism which weaves the most delicate hosiery. You can buy the

same hose you have seen made. Also, in the fifth pavilion, can be seen in miniature all the costumes of the world's most famous women throughout the ages. Fabrics will be represented, one exhibit being in the form of a large pedestal upon which are draped in gradation of delicate colors the finest of fabrics used in the latest gowns. A complete story of how each fabric is made and what it is principally used for will be made clear to visitors.

### **Sears Roebuck Building**

A building which strikingly carries out the modern architectural scheme of the Fair is that of Sears Roebuck and Company. It has a commanding position on the Avenue of Flags. Across from it and a bit to the north, is the Administration Building, near the North entrance.

It is windowless, but has a circulating air plant with an air moving capacity equal to that of 1,800 ordinary six-room residences. A 150-foot tower rises from the base, and the grounds about it are beautifully landscaped. The architects were Nimmons, Carr & Wright.

A children's playground is one of the features of service provided. You may use the telephone or telegraph, check parcels or wraps, obtain information about rooms, hotels, transportation, or the exposition itself. There is an emergency hospital, and a restaurant. The broad wings of the building offer places to rest, and there are refreshments and recreations here as well as within the building.

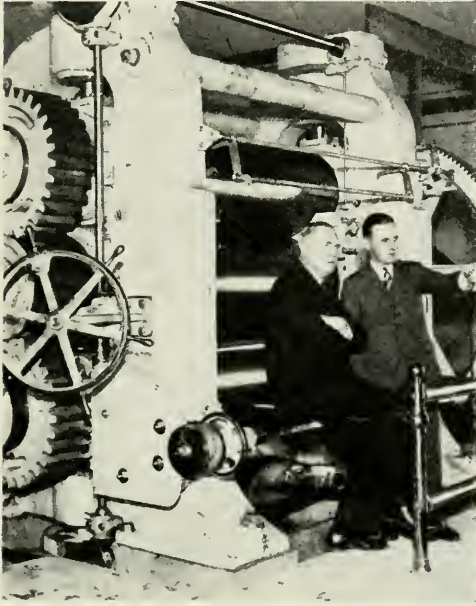
Exhibits, pictures, and demonstrations tell the story of merchandising. An illuminated map shows how widespread has been the influence of this well-known company in the distribution system of our nation.



**The Sears Roebuck Building**

## The Firestone Building

Next door to the Twenty-third Street entrance is the Firestone building, designed by Burnham Brothers. Standing on the hillside, its eastern view is compassed by the horizon over the lake, while to the north it looks down Lief Ericksen drive past the General Exhibit group to the Hall of Science.



**Firestone Tire-Making Machine**

tionary testing machine, showing the gruelling high speeds to which tires are subjected to bring out facts and characteristics which would otherwise only be revealed by thousands of miles of service over a period of many months.

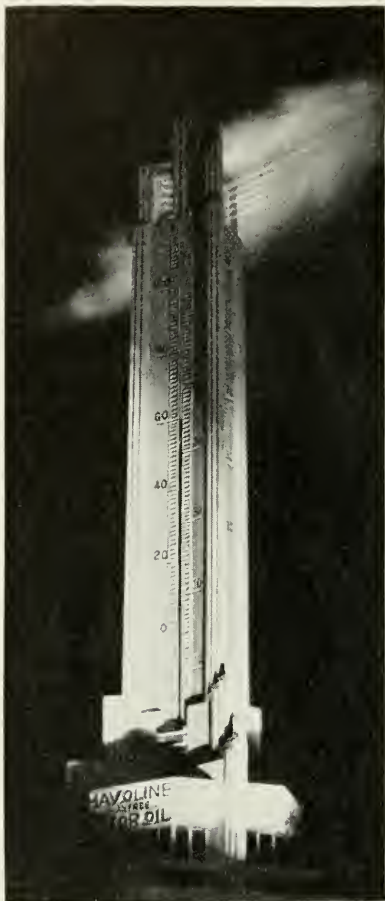
A display auditorium is devoted to dynamically portraying the safety, endurance, and performance of the tires, tubes, batteries, spark plugs, brake-lining and other automotive products manufactured by the Firestone company.

## The A & P Carnival

Another industry which comes to the Fair with color and action is the Atlantic & Pacific Tea company, which has created an area for pleasure, without admission charge, opposite the Twenty-third Street entrance. There is a big open air marine park, with an amphitheater to seat several thousand, surrounding a revolving stage where daily programs of entertainment will be given. You may enjoy concerts by Harry Horlick and his Gypsy orchestra, Gypsy dancing, marionettes, specially arranged by Tony Sarg. With George Rector presiding as master of ceremonies you are promised a real carnival.

In case of rain, the stage can be revolved so that the crowds may watch the performance from the shelter of gay canopies. Every after-

noon there are tea dances on the boardwalk, which is canopied and hung with colorful lanterns. North of the amphitheater is the A & P Experimental kitchen, with a trained dietitian in charge.



**The 200-ft. Havoline Thermometer**

of oil refining equipment and products. Here you see what keeps your motor running smoothly, and why.

### **The Time and Fortune Building**

Another building, representative of the publishing industry, is that of *Time* and *Fortune*, two national magazines. It is located just south of the Hall of Science on the edge of the lagoon. This building is of particular interest to college women. The opportunity is offered them to make this a meeting place for afternoon tea. It also offers parents an information service concerning schools for their daughters.

The Woman's College Board maintains headquarters in the building. Among the woman's colleges represented on the board are Smith, Barnard, Wellesley, Randolph-Mason, Radcliffe, Vassar, Bryn-Mawr, Wells, Lake Erie, Goucher, Mount Holyoke, Connecticut, Milwaukee-Downer, Mills, Trinity, Wheaton, Elmyra, and Sweetbriar.

### **The Great Havoline Thermometer**

Just north of the Twenty-third Street entrance, a great 200-foot tower rises. By day and by night it can be seen from many sections of the Fair and the great numerals on its three faces can be easily read. It is a thermometer, perhaps the largest the world has ever seen, and it accurately tells A Century of Progress visitors the temperature in Chicago.

The numerals are ten feet high, and the graduated temperature columns are made of neon tubing, electrically regulated by a master thermometer. Its official name is the Havoline Thermometer, but officials of the Indian Refining Company dedicated it as a "Monument to Chicago's Climate." Ten miles of wire, 3,000 feet of neon tubing, and 60 tons of steel were required for the structure. In a building at the base of the tower the company presents an exhibit



## The Christian Science Monitor

The Christian Science Monitor pavilion, just south of the Hall of Science and on the west bank of the lagoon, represents the only newspaper to have a building of its own at the Fair. It will house in one room a complete Monitor display showing the unique journalism of the *Monitor*, an international newspaper, as well as other Christian Science literature. Beyond the first exhibit room is a typical Christian Science reading room, such as may be found in many cities, and its ideal location, overlooking the lagoon, is inviting and restful.

## American Radiator Company's "Garden of Comfort"

A beautiful and extensive garden of tall trees, shrubbery, and blooming flowers surrounds a reflecting pool in an area just south of the General Exhibits group. Statuary contributes to the beauty of the area, in which the American Radiator Company and Standard Sanitary Corporation has two buildings.

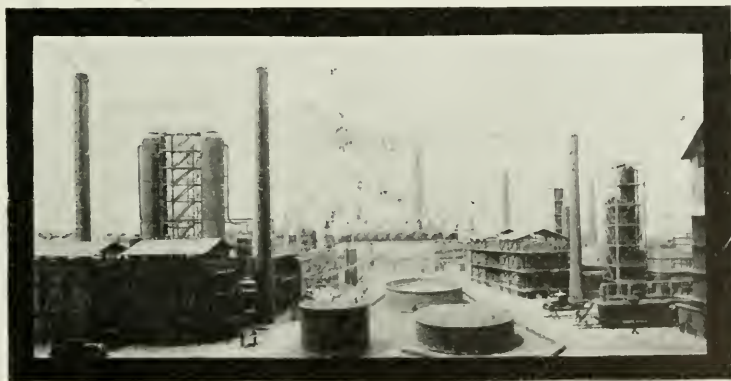
One contains an artificial "weather-making" plant, demonstrating the modern methods of air cooling, along with other exhibitions that tell a story of the new science of air conditioning. The second building contains an exhibition of the latest developments in bathroom design and sanitary plumbing. Five display kiosks erected in the restful garden give color to the scene.

## Prehistoric Oil Exhibit

How geological knowledge is utilized in locating and gauging the extent of the earth's store of crude oil is the theme of the Sinclair Refining Company's outdoor exhibit between the Twenty-third Street entrance and the General Exhibits group.

While nature was mellowing the crude petroleum that are used today to refine motor oil, strange forms roamed the earth.

And so, in the midst of great rocks, shrubbery, and trees, similar to those of the period that geology knows as the mesozoic age, you may see ingenious reproductions of the dinosaurs, long since disappeared.



Diorama of Oil Refinery

## The Fine Arts at the Fair

A hundred years ago, few great paintings had found their way across the waters to America, and the Fine Arts had little opportunity for expression, either in homes or in museums.

Today, it is possible to assemble in Chicago, for A Century of Progress, a collection of selected masterpieces valued at \$75,000,000, and all but one, Whistler's "Portrait of My Mother," come from private, or museum collections in the United States. The famous Whistler comes from the Louvre Museum in Paris, lent through the Museum of Modern Art in New York.

The pricelessness of the collection made it logical that A Century of Progress should utilize the building that is internationally known as an art institute. This loan collection represents the largest and finest in the entire world, gathered together under one roof. Twenty-five museums, and two hundred and fifty privately owned collections, have been drawn upon, augmenting the already exceptionally great pictures for which the Institute is famous.



Whistler's Portrait of His Mother—Loaned by the Louvre, Paris

Paralleling the general exhibits of science and history, within the Exposition grounds, the fine arts exhibit shows you the progress of art in the past one hundred years. It is divided into three sections: 1. The old masters. 2. Outstanding paintings of the past one hundred years, stressing particularly the French and American contributions. 3. Contemporary art, with special emphasis on the work of American artists.

"The theme of the World's Fair is also the theme of the exhibition of fine arts," Robert B. Harshe, director of the Art Institute, says. "It has been broadly interpreted here to mean, not only a showing of famous and characteristic works of the last one hundred years, but a century of progress in American collecting. Today our private collections and museums contain treasures of amazing importance. Since 1833, magnificent works by Fra Angelico, Botticelli, Velasquez, El Greco, Holbein, Titian, Raphael, Rembrandt, Hals, and Boucher, to mention only a few, have found their way into American hands."

So, you may roam the magnificent halls of the Art Institute, or attend lectures prepared for World's Fair visitors, and gaze upon and hear discussed some of the finest examples of painting and sculpture the world has produced. All the galleries on the second floor of the Art Institute have been arranged so that you may follow, in chronological order, the sequence of art history.

### Priceless Primitives

Italian primitives, and German, and French, and Belgian, and Dutch and Spanish, occupy five galleries. A room devoted to German and French primitives of the Thirteenth century starts the story. Here you see, among others, Holbein's "Portrait of Catherine Howard," the Jean Clouet "Charlotte of France," a remarkable small head by Corneille de Lyon.

Dutch and Flemish primitives offer you a study of the work of virtually every artist of merit of the times. Two Rogier van der Weydens, a Memling "Madonna," a brilliant Jacob Cornelisz van Amsterdam, a Geraerd David, a Lucas van Leyden, the famous "St. Jerome" by Peter Christus.

The works of the early Italians occupy four galleries in all. The Segna, "Madonna and Saints," Sassetta's "Procession of the Magi," "Crucifixion," by Masolino, Giovanni Bellini's "Madonna," and a painting of two Oriental heads by his brother, Gentile, are there. Three famous Botticelli paintings, "Madonna and Child," "Adoration with Angels," and a portrait of a young man, supposedly portraying the features of Botticelli himself, in themselves would make a noteworthy, long-to-be-remembered exhibition. But you may see also the "Rape of Deianira," by the brilliant Pollaiuolo, and Bernardo Daddi's "Vision of St. Dominic," and "Lady with Rabbit," by Piero di Cosimo.

And now you come to the Spanish primitives, among which you see the famous Ayala altarpiece (dated 1396) and "St. George and the

Dragon," by the Master of St. George who receives his name from this much reproduced painting.

## **A Glorious Showing of Sixteenth Century Italians**

Sixteenth century painting is superbly represented, with three compositions of the noted Titian, whom some critics call the great artist of all the ages. His "Venus and the Lute Player" is one of the three, and others in this section include the beautiful "Christ Walking on the Waves" by Tintoretto, and "Rest on the Flight into Egypt" by Veronese. Further on is an exhibit dedicated to a group of later Italian painters, Tiepolo, Guardi, Canaletto, Magnasco, Mola, Piazzetta, and others.

## **Dutch Incomparables**

Here are great Dutch masters of the time of Rembrandt in one large gallery, Van Dyck's portrait of "Polixena Spinola;" the magnificent "Aristotle," added to the institute's famous collection of Rembrandts; landscapes of Hobbema and Ruysdael; and the superb "Skittle Players" by Pieter de Hooch among them.

## **Treasures of Spain**

Eleven paintings by El Greco, including the Institute's own great masterpiece "The Assumption of the Virgin," acquired at the beginning of the period that saw El Greco's rise to rank with Titian, Rembrandt and Velasquez, give to the exhibit not only one of the finest of Spanish collections, but also the largest showing of this artist's work in America. "View of Toledo," by El Greco, acclaimed as one of the greatest of landscapes; Goya's "Capture of the Bandit by the Monk," "The Boy on the Ram" and "The Bull Fight," are exhibited, with canvasses by Ribera, Morales, Zurbaran and other Spanish masters.

## **Seventeenth and Eighteenth Century English and French**

"Queen Charlotte" and other great Gainsboroughs; the Constable, "Stoke-by-Nayland;" Reynolds' "The Honorable Mrs. Watson;" and other works of these English painters of the Eighteenth century, with Raeburn, the Scot, represented by several portraits; and examples of Lawrence, and Turner, and Romney, and Bonington continue colorfully the history of art. Seventeenth century French masterpieces, works of Poussin, Claude, and the two LeNains; and Eighteenth century French paintings, including work by Boucher, Lancret, and Pater; "The Industrious Mother" by Chardin; and the David, "Mme. de Richmond and Her Son;" and the Ingres, "Mlle. Gonin," prepare you for the pre-Impressionist period of the first half of this century and completion of the story of a century of progress in painting.

A large gallery given to the pre-Impressionist period in France gives you Delacroix, among his examples being the much discussed "Spring," and Corot's "View from Volterra," the "Jumieges," and the Institute's



own great figure piece, "Interrupted Reading." Millet and the Barbizon School and Courbet and Daumier are represented in the same room. Courbet's "Toilette of a Bride," and Daumier's "The Uprising" and "The Drinkers," are some of the famous paintings shown in this room.

You come now to a study of Impressionism in France, beginning with Monet's brilliant "Argenteuil" in 1868, and many excellent examples of the work of Monet and Degas, among the examples of the last-named being two race-course subjects, "Carriage at the Races" and "Jockeys," and his wonderful "Uncle and Niece."

## The One-Man Exhibit

Cezanne is so honored because he is called "the greatest painter of this century" and though dead twenty-five years, his influence still is a powerful one. You will see his "Still Life with a Clock" and the vivid "Still Life with Apples," and "Road to Auvers," and "The Bathers," among an impressive array of seventeen of his most renowned paintings.

Manet and Renoir continue the story—"Christ Mocked," "The Music Lesson," the two "Philosophers," the "Boulogne Roadstead" among the Manets; and "Luncheon of the Boating Party," "The Moulin de la Galette," the "Bather," and "Diana, the Huntress," and "The Two Little Circus Girls," outstanding Renoir examples. These are followed with works of Gauguin, Seurat, and Henri Rousseau in a single gallery; "Tahiti Women and Children," "Tahitian Mary" among thirteen canvasses of Gauguin; and "A Sunday on the Grand Jatte," one of the greatest of Seurat's examples.

Matisse and Picasso carry on the story with canvasses such as Matisse's "Decorative Composition," and "White Plumes," "Pont St. Michel;" and Picasso's "The Woman with a Fan," "Figures in Pink" and "The Woman in White."



The Art Institute

## America Enters

And then a gallery of distinguished American portraits of the Colonial and Federal periods, works of Copley and Stuart and Ralph Earl, Hesselius, Feke and others. Albert P. Ryder's "Marine" and "Death on the Pale Horse," "Diana's Hunt" and "Elegy in a Country Churchyard;" Thomas Eakins' "Music" and "Addie" and "The Pathetic Song;" Winslow Homer's "The Herring Net," "The Look Out—"All's Well";" John Singer Sargent's "Mrs. Charles Gifford Dyer," and "Robert Louis Stevenson" and his well known "Egyptian Girl;" and Whistler's famous "Mother," and several others of his examples, including "In the Studio," and "Nocturne, Southampton Waters."

## A Famous American Woman

Mary Cassatt, the only American woman recognized by the French as ranking with Manet and Degas, is represented by "At the Opera" and "The Girl Combing Her Hair" and "The Toilet."

Duveneck's "Whistling Boy" is shown, and Blakelock's "The Vision of Life." Inness' "Coast of Cornwall," and "Storm," and "Moonlight on Passamaquoddy Bay;" Maurice Prendergast and Twachtman, the late Arthur B. Davies are all represented, as is George Bellows, famous for his "Mother."

Seven galleries in all are given to contemporary American painting, many of the artists themselves cooperating with museums and individuals to lend generously of their collections to present one of the greatest American exhibits ever shown. With them are shown contemporary works of artists of France, Italy, Germany, England, Switzerland, Poland, Norway, Spain, Russia, Mexico and Czechoslovakia.

## And Noteworthy Sculpture

The Art Institute possesses an exceptional collection of originals and casts of Nineteenth century sculpture, and to this collection have been added important pieces representing the work of leading American contemporaries, including Charles Cary Rumsey, Stirling Calder, Lorado Taft, Paulanship and William Zorach. The work of Maillol, Bourdelle, Rodin, Jean Poupelet and Despiau of the French; and of Lehmbruck, Belling, Di Fiori, Barlach, Kolbe, of the Germans is shown, as is that of others of international importance, including Mestrovic, Milles, Kai Nielsen, and Epstein. The sculpture is scattered through the corridors of the first and second floors, and shown in some of the contemporary galleries.

## A History of the Graphic Arts

Paralleling the Century of Progress exhibitions of painting and sculpture there is found in the Print Galleries of the Art Institute, an exhibition of the greatest masterpieces in the history of the graphic arts. It is in two sections: "Prints by Old Masters," and "A Century of



The St. Lazare Station, by Deouard Manet—Loaned by Mr. Horace Havemeyer

Progress in Printmaking.” Some of the finest collections in the world are represented.

In the section devoted to prints of the old masters, the first two centuries of the development of the graphic arts in Europe are exhibited. Beginning with the early pictorial woodcuts of Germany, the progress of this, the oldest graphic art, is traced to religious teaching in the early Biblical pictures, through its use as illustration in the printing from wooden type of books of the fifteenth century, to its culmination, during the early decades of the sixteenth century, in the work of Dürer and Holbein. The progress of engraving in the north of Europe is represented, Italy’s activities are traced from the rare niello prints to the great accomplishments of Pollaiuolo and Mantegna.

### Lovely Etchings

The exhibition of the art of etching begins with Dürer’s “Christ on the Mount of Olives,” 1515, and its development in Germany, and France is followed through the work of Altdorfer and Hirschvogel, Callot and Claude. The rise of lithography is shown from Delacroix to Daumier, followed with examples of the present day revival in a section devoted to contemporary work.

You may listen, if you wish, to three lectures daily in Fullerton Hall, by a staff of eight lecturers, and visit the galleries under the guidance of a museum instructor.

## Special Events

### Fetes of Many Nationalities

When Postmaster General Farley officially opened the gates of A Century of Progress on May 27, he ushered in an era of color and festivity. With the opening of the Exposition, plans were rapidly being completed for special celebrations in varied fields of activity. A glance at the schedule of events which will be taking place each day over the Exposition grounds assures a visitor to the Exposition of his choice of pageantry, sports, music, lectures, military drills, and all forms of entertainment and interest.

On specially designated days American citizens of foreign descent will give splendid fetes featuring the customs, songs, dances, and costumes of the lands from which their fathers came. On these National Day Celebrations the festive spirit will prevail; distinguished visitors from the respective nations will be honored, and flag poles will fly the particular colors of the day.

Scandinavia with its various groups, the Swedish, the Norwegian, Danish, and Finnish will find its colors flying from June 19 to June 23, culminating in a joint Scandinavian Day in Soldier Field.

Following closely on June 25, the Czechoslovakian Sokol, the gymnastic festival which has become tradition in that country, has been arranged as it is presented annually in Czechoslovakia. Czechoslovakian societies expect to fill Soldier Field stadium again in August. Features of the day are the junior calisthenics, folk dances, and singing by colorfully costumed participants whose number approaches three thousand.

On Jugoslavian Day, July 2, girls in national costume will be found dancing at various points on the grounds, just as they might be found on a fete day in their old country. Similar programs are planned by the Armenian, Bulgarian, Hungarian, Ukranian, Austrian, and Lithuanian groups.

July 17 to July 23 is the Polish week of hospitality. During that week and particularly on July 22 will be depicted the historical events and the contribution of the Poles to the United States in the past one hundred years. Tableaux, floats, and typical Polish festivities will create a picturesque and gay atmosphere.

In celebration of the birthday of Queen Wilhelmina of the Netherlands, the Knickerbocker Society of Chicago will be host to the people of Dutch descent.

On Welsh Day under the leadership of Dr. Daniel Protheroe the Welsh Male Choir is scheduled to give concerts during the day, singing works composed by Welshmen.



Ancient, modern, and Greek music and dancing, coupled with a visit from the minister of Greece, will mark the official celebration of that country.

The Jewish Agency from Palestine have made plans for a magnificent pageant in Soldier Field on July 3, "The Romance of a People," depicting the history of the race from Abraham to the present day.

So on, throughout the five months, outstanding national groups will bring in succession, to A Century of Progress, the feeling and atmosphere of all spots of the globe.

### State Celebrations

The various states of the Union are celebrating on special days in the majestic Court of States, the first of these being Alabama Day on June 3. The feature of the day will be the concert of the Girls Glee Club from the Women's College of Montgomery, Alabama.

Outstanding among the state programs is California Day on July 7, the date marking the 87th anniversary of the raising of the American flag at Monterey, California, by Commodore Sloat, when taking possession of California for the United States. The Pacific Coast Band and Symphony Orchestra will provide California music.

In addition, many important cities have selected days when their residents and local dignitaries may gather at the Fair *en masse*. Among the many reunions planned, perhaps the one which will have particular sentiment and significance will be that of the old Columbian Guards who served in the Exposition of 1893. A great number of these gentlemen have responded to the invitation of the Exposition and plans to meet with friends of long ago on that day.

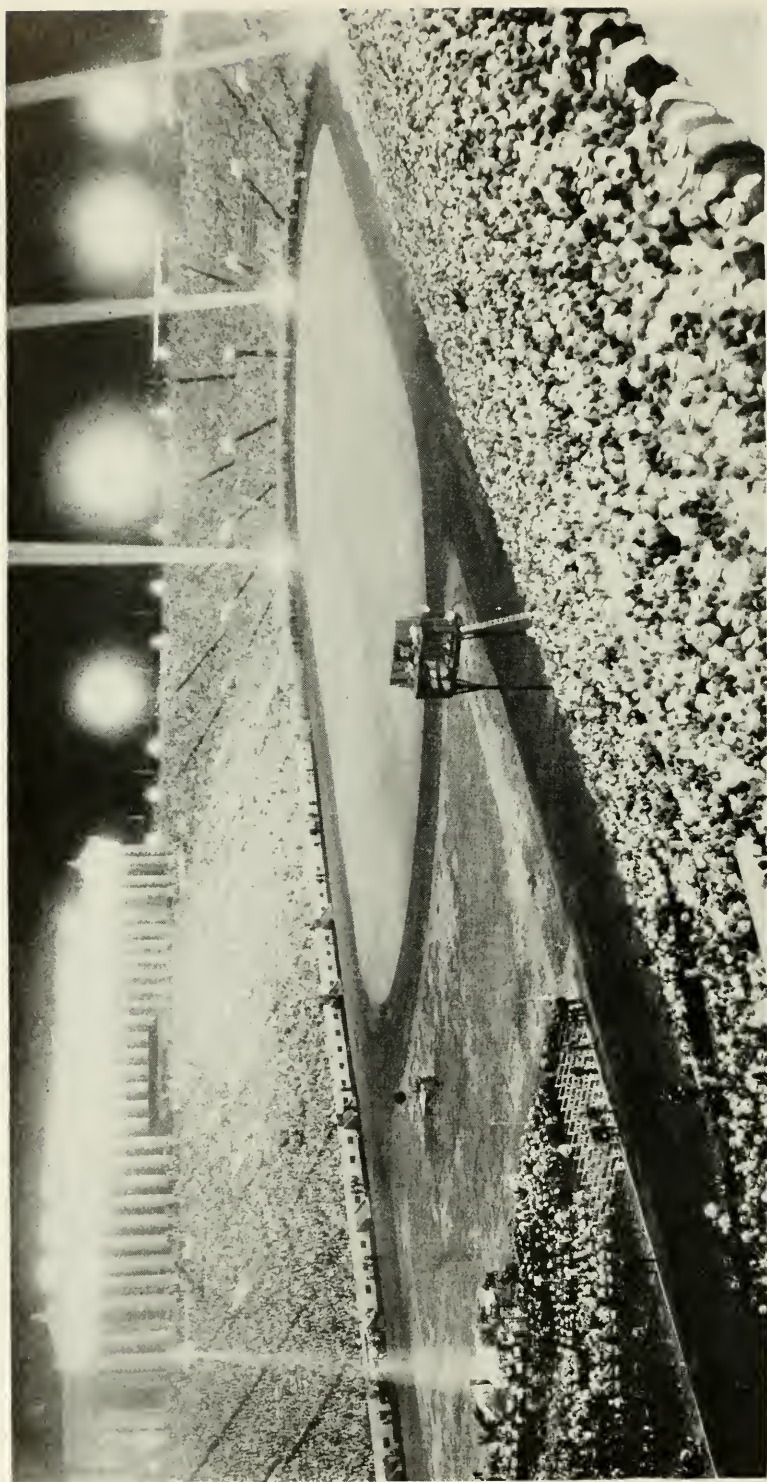
### Scientists Meet

The Science Congress, sponsored jointly by the American Association of the Advancement of Science and A Century of Progress, will bring to the Exposition from June 19 until June 30, a group of its most distinguished visitors. Men of eminence in every field of science are to be guests of the Exposition. On the evening of June 19 in the Hall of Science the reception of welcome will be given.

### Shows and Other Activities

On May 30, extending through June 10, the spectacular Army show marks the beginning of events in Soldier Field. An extensive sports calendar with national and international contests offers its sport devotees a choice of witnessing the champions in action in every known sport.

From the bleachers just south of the Administration building, facing the North lagoon, Fair visitors may witness the most thrilling of water activities known in this country. Swimming and diving championships, national outboard motorboat championship regattas, national canoeing and rowing championships, fly- and bait-casting tournaments and dare-devil stunts are featured among the innumerable programs arranged.



Soldier Field at Night

From these same bleachers thrill-seeking crowds will witness weekly, brilliant and spectacular night frolics in the Lagoon on the Lake front, illuminating the already fairy-like picture with fantastic designs.

## Musical Programs

Music at A Century of Progress is under the supervision of Dr. Frederick A. Stock, conductor of the Chicago Symphony Orchestra and director of Music for the Exposition. The program for the duration of the Fair is eclectic; amateur, volunteer and professional.

There is no temple of music or auditorium in the fair grounds adapted for concert purposes, but the spacious courts and terraces of the Hall of Science, the Hall of States and the great Soldier Field stadium, are well suited to the presentation of large choruses and band concerts. Many of these, both professional and non-professional, have been scheduled. The quiet lagoon, surrounded by spacious boardwalks and overlooked by a large grand-stand, presents an ideal setting for the many musical pageants on floating barges, or stages, planned this summer.

The Chicago Friends of Music, with the sponsorship of A Century of Progress, have planned a series of symphony concerts to be presented during June and July in the Auditorium theater. These concerts will be presented every Wednesday, Thursday and Friday evening by the Century Symphony Orchestra under the leadership of Dr. Stock.

This orchestra will present two concerts in the court of the Hall of Science early in June and it is the plan of the Chicago Friends of Music to develop a series of these symphony concerts within the fair grounds during August and September.

Programs of popular music are presented by various state and national groups, choral societies, public schools and musical organizations throughout the Fair. They will be announced from week to week in the official program.

Munday Choristers, who have, in recent years, made a name for themselves as one of the outstanding groups of negro talent in the city, will provide programs of spirituals.

Civic and educational music circles have enthusiastically joined forces in bringing to the Exposition leading choral societies, high school bands and orchestras, college glee clubs, and high school singing. Early in the music schedule, the Choral Directors' Guild presents on June 4 a festival chorus of 5,000 voices which will be ably assisted by the Symphony Orchestra under the direction of Dr. Frederick A. Stock. The National Music Supervisors' Conference has succeeded in scheduling on the Exposition grounds almost daily concerts by bands, orchestras, glee clubs, such as Valparaiso University Choir, Tennessee State Teachers College Band, University of Cincinnati Glee Club, and the Wisconsin All-State High School Band concerts. Forms of music from the most elementary to those of grandest style and highest artistic technique are being provided. On July 4, the Rural School Chorus of six hundred



will give a concert in the great Hall of Science, and on August 23 the Houston Civic Opera Association of Texas will sponsor its elaborate production of "Aida," which has already won much applause in the southwest.

Restaurants, dancing pavilions and other concessions will furnish all that could be desired in the way of dance and popular music throughout the summer.

## Other Activities

In addition to the above activities there will be military drills by Toronto Scottish Regiment, National Guard activities, an International Chess tournament, and contests of every description.

Hundreds of professional and fraternal organizations have selected dates on which they will bring men and women who are foremost in the world of affairs to participate in their programs. To mention a few, there is Electric Day on June 7; Engineers Celebration, June 28; Daughters of the American Revolution, June 14; Real Estate Board's observance of Home Owners' Day, June 16; and assemblies of such groups as the Chicago Association of Commerce, the American Institute of Banking, and the National Coal Association. With Chicago as *the* convention city of the world this summer, organizations from every leading industry and profession will bring their members to mark participation in Chicago's International Exposition.

## A Calendar of Sports

Forty national athletic championships, a dozen or more events of international competition, and various sectional contests focus the attention of sport devotees of the nation upon A Century of Progress and Chicago from May 27 to November 1.

Soldier Field, Chicago's memorial to her soldier dead, which faces the Court of Honor, provides one of the world's great amphitheatres, with a possible seating capacity of over one hundred thousand. With this huge horseshoe of concrete as an active sports center, Chicago's water front, airport facilities, golf courses, big league baseball parks, and other places of play complete the picture for a varied and colorful calendar of sports competition throughout the summer months.



Outboard Motorboat Racing on the Lagoon



## Track and Field Events

The National Interscholastic and Intercollegiate Track and Field Championships schedules for June 16 and 17 begin a long series of meets for both men and women. On June 29, 30 and July 1 the spectators at the National A. A. U. championships will see outstanding international stars who held the spotlight at the 1933 Olympics, among them the famous Japanese trio, consisting of Nishida, the pole-vaulter, Yoshioka, sprinter, and Nambu, world's hop-step-and-jump champion; O'Callaghan, great Irish hammer thrower; Tisdale in the 400 meters; Donda, Czechoslovakian shot-putter; Jonath, Germany's sprinter; Kuspcincki, Polish distance runner; Iso-Hotle, Jarvinen, and Lehtinen, the Finns; and Beccali, the Italian. The National A. A. U. Junior Track and Field Championships on June 29, the National Track and Field Championships for Women on the afternoon of June 30, and on July 1, the N. A. A. U. Gymnastics, the N. A. A. U. Decathlon and Relay Championships—here is sports fare to satisfy the most exacting of appetites.

June 11 and June 13 will witness the Canadian and United States soccer teams opposing each other, and the American Amateur and Illinois teams in the same sport. Outstanding events for the remainder of the month of June include National Fencing Championships on June 23 and 24, Gaelic football between the Irish Champions and the United States team June 10 and earlier in the month, June 4, the National Golf-Driving and Approach Championships.

## Five College Football Games

Including two Big Ten conference games, visitors to the Exposition will have opportunities to witness five excellent football games as a part of the Soldier Field program. One of these noteworthy gridiron events of the fall schedule is an international contest and one an important

intersectional meeting which may have a bearing on the national football championship. Following is the schedule:

East - West All-Star Football Game, August 24; University of Mississippi vs. Mexico City University, September 16; Northwestern University vs. Iowa, September 30; Northwestern vs. Stanford, October 14; and Chicago vs. Michigan, October 28. The first of these is the result of the efforts of Coach Dick Hanley of Northwestern and Coach Howard Jones of the University of Southern California to bring together stars of 1932 teams.



Football at Soldier Field

## On the Lake and Lagoon

Lending thrills and color to the North Lagoon, outboard motorboat regattas and stunt races will be staged throughout the summer, reaching peaks on June 25 in the Hearst Gold Cup regatta, and on September 23



At the Water Carnival

and 24, when competition will be greatest in the National Outboard Championships. Swimming and diving contests will hold an equal interest. On July 14, 15 and 16 the National A. A. U. swimming and Diving Championships for men will be held, with the National Water Polo games vying for applause at the same time. Japan is sending its champions to Chicago to challenge the best of American swimmers July 20, 21 and 22. Close on the heels of this event, comes the Women's

National Swimming and Diving of the A. A. U. August begins with the Central States Rowing Regatta on the first, second and third, National Rowing Championships, including a three-quarter mile dash, August 4 and 5, followed by the National Canoeing races August 5 and 6. These six days will bring college and university crews from the east, middle-west, and far west to compete with Canadian crews and oarsmen from rowing and athletic clubs. Not the least important will be the Boy Scout regatta of canoeing on September 16, and the Western States regatta September 9. Fly and bait-casting tournaments, log-rolling contests, and the like will contribute to the excitement.

## The Boys Play Marbles

A million boys have been playing marbles in contests to determine who in their respective localities should compete in the Western Section Championship Finals of the National Marble Tournament in Soldier Field from June 26 to 29.

Lacrosse will have its representation in a series of amateur games between the United States and Canada from July 10 to 15, and professional Canadian competition from July 17 to July 23.

The National A. A. U. Weight-Lifting Championships are scheduled in August or September, and the World's Horseshoe Pitching Championships will be played off in Soldier Field from July 24 to August 6.

A baseball tournament of the American Legion takes place August 21 to 23, and in connection with the national convention of that organization in October, the "40 and 8" boxing tournament will be a feature.

## And in the Air

American Air Races at the Chicago Airport will be run the first four days of July. World famous flyers will again participate in the International Air Races and the Gordon Bennett Balloon Race at the Curtiss-Reynolds Airport September 1, 2, 3 and 4. One of the most spectacular air events of the Fair, and of the year, is the flight from Italy of 24 planes, bearing Italy's famous aces, in the latter part of June, weather conditions determining the time of starting from Rome. This armada of the air will land north of Grant Park, and be water-taxed to the exposition grounds.

## Other Sports Events

Among the many sports events held in and about Chicago will be the National Open Golf Championship at the North Shore Country Club June 9 to 11, at which Gene Sarazan will defend his championship; the National Clay Court Tennis Championship the week of July 3; the Western International Women's Golf Championship, June 21, at Riverside, June 22 at Beverly, and June 23, at an Evanston Club; the England vs. U. S. cricket game in Washington Park, September 2 and 3, and yachting events of all classes on Lake Michigan courses.



Gene Sarazan

Major League baseball games are almost a daily occurrence at Wrigley Field, where National League games are played, or at Comiskey Park, home of the Chicago White Sox of the American League. The Chicago Cubs are 1932 National League Champions.

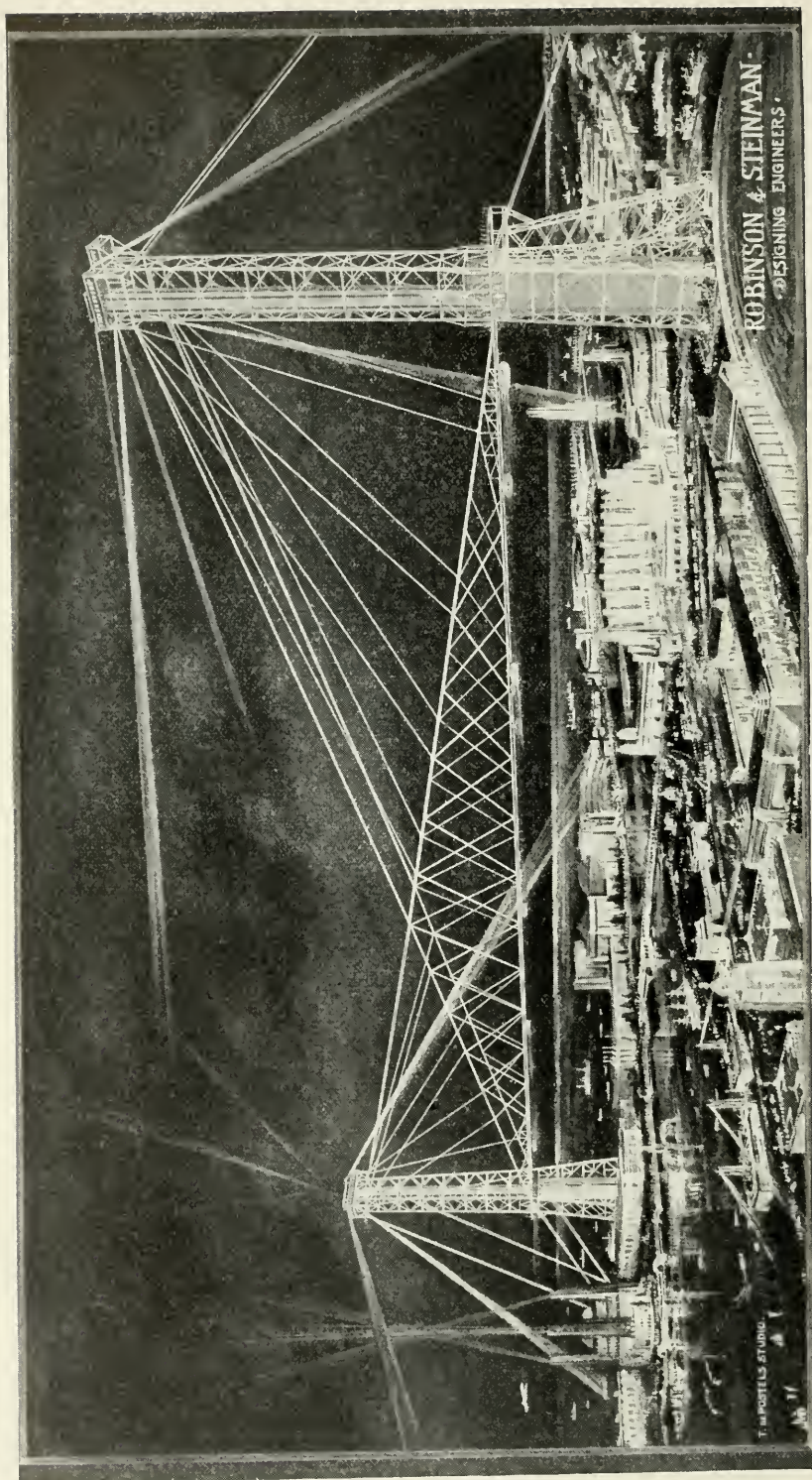
A Chess Congress and Championship bridge games will be open to participation and observation in the Hall of Science at certain times during the summer.

In fact, there will be zestful competition by champions in almost every field of sporting interest, almost any day for the visitors to A Century of Progress until the Exposition closes and what more could a fan ask?



Baseball is Daily Fare





The Skyride



## Fun and Special Attractions

Fun reigns in the Fair. Nor is it confined merely to the strip exactly 1,933 feet long that is devoted to the barker, the blare, and the ballyhoo. It is everywhere—wholesome fun and fascinating adventures for those who would drop their cares and don the cloak of conviviality.

### The Towering Skyride

Two towers stand like giant sentinels, 1,850 feet apart, seeming to guard the Hall of Science on the Mainland, and the Hall of Social Science across the Lagoon—support of the spectacular Skyride, great thrill feature of A Century of Progress. Back in '93, it was the monster Ferris Wheel that everybody talked about, and everybody rode. Today, striking example of the progress of science even in thrill makers, is this suspension bridge principle applied to an entertainment feature—and perhaps the near solution of some problems of overhead transportation.

They are higher than any building in Chicago, these two strong steel towers, imbedded deep in cement. Six hundred and twenty-eight feet they rise into the skies, with observation floors atop them. If you stand in one of these observation rooms at night and look down, you gaze upon a magic city that seems to float in a vast pool of light. From the towers, great searchlights sweep the sky, the lake, and over the great city to the west, to clash with other massive beams of light. In the day, look down, and it is a pattern of many hues, like a gigantic, gay rug, or a vast garden of colorful flowers. Far to the south you look upon Indiana, and to the north upon Wisconsin, to the west, Chicago and Illinois, and eastward across the lake you can see Michigan. Airplanes, and dirigibles may pass, as cars do on the ground, and clouds may swirl about you. You are standing a hundred feet higher than the observation level of Washington monument.

On a 200-foot level the rocket cars offer you a beautiful and, mayhap, thrilling ride across the lagoon. These cars are suspended from a cableway which has a breaking strength of 220,000 pounds per square inch of cross section. Only one span in the world, that of the George Washington bridge across the Hudson River just above New York City, exceeds the Skyride cableway in length. The towers and rocket cars can handle 5,000 visitors an hour.

The Skyride was built by five great companies, Otis Elevator Company, Mississippi Valley Structural Steel Company, John A. Roebling's Sons Company, Inland Steel Company, and Great Lakes Dredge and Dock Company and is an appropriate expression of their faith in the future of American industry.

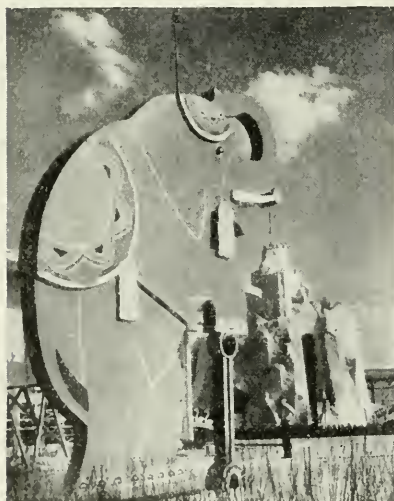
## The Children's World's Fair

Five acres of land in A Century of Progress are set aside for children—and for grownups, too, who still can feel the thrill of make believe. The Enchanted Island lies between the lagoon and the lake, and from it rises a towering mountain. About it are giants, and through the area on Northerly island move guards and other employees as out of Fairyland, dressed appropriately for their parts.

A huge push-wagon stands fifteen feet high, with a big boy on its top who moves, and underneath it is a shop where wagons are made. There's a house of marbles, and a children's restaurant. There are story telling ladies, and playgrounds with all sorts of devices.

The youngsters can slide down the mountain side, and there's a fairy castle, a mechanical zoo, a miniature railroad, a marionette show. They have their own theater, too, with plays staged by the Junior League of Chicago; such as "Peter Pan," "Cinderella," "The Birthday of the Infanta," "The Ordeal of Sir Gawayne," and "The Captivity of Eleanor Lytle," which is a true story from the life of Mrs. John Kinzie in the early days of Chicago.

There are trained attendants who will amuse the children while their parents go away to other parts of the Fair to enjoy themselves. It's a land of allure for the children, a spot they'll never forget, even when they are as old as their parents now are.



Left—Jumbo and  
the Magic Mountain—

Right—Jacob  
Elmo Littleton,  
7½ ft. Giant  
Greets Children



The Enchanted Island

## The Midway

The Midway—City of a Million Lights—revives vivid memories of the Fair of '93. You encounter its first flaring banner when you turn south from the Twenty-third Street entrance. Visit it by day, and you may think of brilliant bands of color connecting two great sections of the Fair; at night, you might think of a gorgeous scintillating trinket. Though such are the effects achieved with colored, and modern white lighting, that even in this area of spectacles and sideshows, strange and unusual attractions, and circus cacophony, beauty has been attained.

Ride the breath-taking roller coaster, or the flying turns that combine the thrills of a toboggan with those of a coaster. Play the games. Watch the tricks of magic. Visit the place where daring youths dive into tanks and wrestle with alligators. Enter here where beauties of the Orient dance to strange tunes, and wrestlers, fencers, swordfighters, and Egyptian diviners and jugglers, give you glimpses of Cairo, Damascus, Tunis, Tripoli, and Algiers. See the "apotheosis of America's womanly pulchritude," the "living wonders," the Siamese Twins, giant people, and other "freaks" gathered from the four corners of the earth.

Turn aside to visit the Midget Village, where sixty Lilliputians live in their tiny houses, conduct their diminutive activities, serve you with food, and entertain you with theatrical performances. See the strange snakes, giant pythons, and other rare reptiles. And here's the Dance Ship, double decked, with two dance floors and two orchestras on the lakeshore, accommodating 2,000 or more dancers. See the Pantheon de la Guerre, largest war picture in the world, characterized with the thrilling action of the World War, or the Battle of Gettysburg, which was here in '93. Eat in the Circus Cook House, with sawdust floor.

## The Streets of Paris

On the lower road is a city, a Paris moved over to America, for entertainment. Here, in narrow, stone paved streets, are gendarmes, sidewalk cafes, quaint shops, chestnut vendors, strolling artists, milk maids, and musicians. There is music and dancing, wax works, and an atelier. There's a beauty revue, and clowns, peep shows, a chamber of horrors. The streets are named as in Paris, the buildings faithful reproductions. There are even some of the famous Parisian restaurants.

## Places to Shop

Chicago is one of the great shopping centers of the world. Her great stores are renowned, her smart shops famous, the Merchandise Mart is the largest building in the world. And within the grounds there is a reflection of the city's outstanding position in this respect. You may shop at the Fair to fill almost all needs. In many of the buildings, products are offered for sale, and also in the concessions. Two shopping districts in particular, offer a wide range. Science Bridge, at Sixteenth street, which connects, across the Lagoon, the Hall of Science and the Hall of Social Science, has at its curving north end a terrace, with a ramp

leading from Leif Eriksen drive. Along the terrace are many interesting shops for drugs, jewelry, souvenirs and novelties, pipes and smoker's articles.

At Twenty-third street is the beautiful plaza and the Twenty-third Street bridge, curving with the end of the south Lagoon. On this plaza, and the bridge, is a concourse of shops, each with a 19-foot frontage, and with glass show windows. There is another drug store here, an elaborate men's furnishing shop, furniture displays, toys, gifts of all kinds, jewelry, photograph studios, movie studios, candy, theater ticket offices and many others. This concourse is declared to rival in beauty the Ponte Vecchio in Rome.

### An Aviation Show

Go south of the Midway, and, across from the Travel and Transport building, there is the Air Show. Famous planes which have made history are on display—planes which have crossed the Atlantic, the Pacific, and planes which have made speed records, won all kinds of races, and set endurance and altitude marks. One of the most famous of these is the ship in which Glenn H. Curtiss won the \$10,000 prize for a flight from Albany to New York, a distance of 143 miles, covered in two hours and fifty minutes—back in 1910. Another is the *Columbia*, in which Chamberlin and Levine crossed the Atlantic to Germany. Still another is the *Woolroc*, in which Col. Art Goebel and Lt. Davis flew from Oakland, Cal., to Honolulu, 2,400 miles, in 25 hours, 17 minutes. Every type of ship is shown, and a complete history of aviation given.

### Hollywood

Just south of Enchanted Island is a place where you may go and see motion pictures in the making and actual radio broadcasting. This is the World's Fair Hollywood.

Motion picture productions are filmed daily, and you can watch sound recording and "shooting" through a glass before a 60-foot stage. Amateur movie photographers may bring their own cameras to Hollywood and shoot scenes on the outdoor sets which surround the building. News reel companies throughout the summer are filming various motion picture celebrities visiting the Fair, as guests in this Hollywood. Burton Holmes, Inc., operates modern sound recording equipment in the studio, and RCA Institutes, Inc., has charge of the technical direction.

From two well-equipped studios programs will be broadcast, in many cases by the leading stars of this marvelous new means of entertainment and instruction. In addition, there will be exhibitions of television—the art of tomorrow.

Also, in what is called a Spectaculum, you may see something wholly new in motion pictures—"natural vision pictures," or three-dimensional pictures that give depth to the characters as though they were on the stage.



## A Livestock and Horse Show

Just south of the Travel and Transport building you can see a horse show, a livestock exhibition and a dog show. The purpose of the display is to picture the development of the horse from the wild west mustang to the racing thoroughbred, and of cattle from the old Texas longhorn to the broad-backed Holstein, Hereford, and Polled Angus steers. You will see here the largest horse, a white purebred Percheron, brought from France, weighing 3,000 pounds and standing nineteen hands high. Most of the horses have been exhibited in famous horse shows. The cattle exhibit includes a sacred Brahma steer of India. The dog show includes many varieties of pedigreed dogs.

## Goodyear Blimps

The other side of the Travel and Transport Pageant from the Air Show is the Goodyear acreage. Here, the *Puritan* and her sister ships will give you a dirigible ride over the grounds, and show you how it feels to have the lake and city below you and the clouds around you.

## A Bathing Beach

Where the lake comes in to wash upon the north tip of Northerly island, Jantzen's Beach offers children or grown-ups a place to bathe safely, in a scene as colorful as the rest of the Fair. There are diving boards, and clean sands, and lifeguards, and gay umbrellas. The beach will accommodate many thousands and provide you a taste of the seaside resorts of the world.



Admiral Byrd's South Polar Ship

## **The World a Million Years Ago**

It is hard for us to conceive of a world inhabited by monsters other than those of industry. But, when we cross the broad plaza at Twenty-third street to a spherical building on the hillside by the lagoon, we see examples of prehistoric creatures that would, in the flesh, terrify the bravest man.

Step onto a concourse, in motion, and you will be transported through "The World a Million Years Ago." You are carried past a tunnel in which is a series of six dioramas display the animals of the ice age and "man" before the dawn of history. The Java or Ape Man family, the Piltdown man, Neanderthal man, and the Cro-Magnons—all animated—are there before your eyes. Then you enter the main arena. Here, gigantic, prehistoric beasts and reptiles are brought to life—platybelodons, a huge hairy mammoth, giant gorillas, saber-tooth tigers, and ground sloths are seen in conflict. Also, the glyptodon, triceratops, pterodactyls, the massive dinosaur, brontosaurus, and the death struggle of the vernops and dimetrodon are represented in their natural habitats—seem to be alive, breathing, uttering cries, and moving.

## **The Belgian Village**

Immediately adjoining the Twenty-third Street entrance you find yourself pulling the latchstring of a Sixteenth century Belgian Village. The houses and buildings are exact reproductions of those seen by the American tourist in Belgium today. Cafes, typical mediaeval homes, a fish market, an old church and a town hall go to make a display which will be unsurpassed.

The village is inhabited by craftsmen in the costumes of hundreds of years ago. Ancient folk dances are a feature of the main square. Typical Belgian milk carts drawn by dogs and driven by merry milk-maids add to the picturesqueness of the village.

## **The Ukrainian Pavilion**

If you should enter the exposition at the Thirty-seventh Street entrance, one of the first things to catch your eye is the Ukrainian pavilion, the display of a group of Ukrainian societies of America and Europe. It is a picturesque building in which there is a theater where folk plays, native dances, and choral singing are given. Exhibits of the painting and sculpture of the Ukraine, and a restaurant distinctively that of the valley of the Dnieper, lend another colorful note to this area.

## **The Polish-American Pavilion**

At the northerly end of the island is the Polish-American pavilion where the famous painting of Golgotha occupies the greater part of the ground floor. Polish handicrafts in all the wealth of their variety, folk dances, Polish music and drama will take their place in this colorful display.

## Historical Group

### The Drama of Old Fort Dearborn

Go south beyond the Midway, and near Twenty-sixth street step within a log stockade that stands to the left of the roadway. Before you pass within, look back and scan the Chicago skyline with its towering skyscrapers; drink deep of the scene about you that voices a century of progress.

For the next moment you are to be carried back a hundred years and more, back to a day when Chicago's few settlers huddled close to Old Fort Dearborn, and the fort housed soldiers to protect them, and to hold the line of advancing civilization against the northwestern tribes. Here is contrast almost breathtaking—a century spanned with a few short steps, and with little need for imaginative aid.

This is Old Fort Dearborn as it actually was, faithfully reproduced in every detail, constructed even as toiling men built the first Fort Dearborn in 1803. The original, when completed, stood near where Michigan Avenue crosses the Chicago River. And along this same Michigan Avenue, on a day in August, 1812, while war with Great



Fort Dearborn—The Parade Ground

Britain was raging, men and women marched from the fort and were massacred by the Indians; only a few survived that terrible day.

As you enter the massive log gate leading into the stockaded inclosure you see a quadrangular parade ground, in the center of which is the 70-foot flagpole. The flag that flies from it carries, you will note, fifteen stars for the states of 1812. Guards are dressed in the blue and white uniforms of the era. Double rows of log palisades, ten feet and five feet in height, are so arranged as to permit the fort's blockhouses to command the terrain outside, and the inner space between the palisades. On the northeast corner is a blockhouse, and one on the southwest corner. Along the walls are narrow slits, through which, in the original fort, soldiers trained their guns.

Here are the soldiers' quarters, and across from them those of the officers. On the east side are the commanding officer's quarters, next to them the supplies building, then the powder magazine.

You may spend hours looking at maps, and records, and relics. Photostatic copies of the old fort, other historical documents and records, and books of the period, decorate the walls. There is a facsimile of a treaty between the United States and the Sac and Fox tribes, in 1832, by which the government paid the Indians 3 cents an acre for the land of northern Illinois. An old four-poster bed, brought from England 115 years ago, a corner cupboard more than a hundred years old, pewter dishes brought from England 124 years ago, tools and fire-arms, and an old oxen yoke and a quaint wooden meat grinder 125 years old. On the table a sample ration for a day of the soldier of the time is laid out—a pound of flour, a pound of meat, vinegar, a half gill of whisky, salt, and a piece of soap.

In a corner of the enclosure is an open fireplace, over which hangs a huge iron pot, and perhaps you can picture the fire glowing on winter nights, and women of the fort making soap for the garrison. In the rooms are other fire places, with andirons, long handled frying pans, huge kettles and spits for roasting fowls. Warming pans that made beds



Entrance to Fort Dearborn



comfortable on cold nights, and trundle beds for the children, which conveniently slid under the larger beds in the daytime; a churn of maple with wooden hoops, and a dough tray; are all shown. The fort's store is reproduced with jerked beef, skins and knives, calico cloth and corn meal, ready for sale.

Two brass cannons that were brought to the original fort in 1804, and two others made in Paris, peer menacingly out of the blockhouses. They were loaned to the Exposition by the United States Military Academy at West Point. Daughters of the American Revolution, The American Legion, The Chicago Historical Society, The Smithsonian Institution, and the U. S. Army and Navy all contributed generously to this display.

### **A Tragic History**

Here within these log walls you reconstruct the story of old Fort Dearborn, established in 1803 and named after General Henry Dearborn, Revolutionary soldier, then Secretary of War. In command of the troops sent out to build the garrison, was Captain John Whistler, grandfather of the famous artist, whose "Mother" and other paintings you see in the magnificent art exhibits in the Art Institute. He brought with him his family. The summer after the fort was finished, more than half the inhabitants of the little community were stricken with fever from the impure water and inadequate drainage.

But the Indians then were friendly, and there was fishing, and hunting, and a plentitude of firewood, and food. Captain Whistler was relieved in April, 1810, and was succeeded by Captain Nathan Heald. One day in April, 1812, after war had been declared with Great Britain, a band of Winnebagos, who formerly were friendly, suddenly changed their attitude. They murdered two settlers, farming outside the stockade. In August, General Hull, Governor of Michigan Territory, fearing for the safety of the small fort and its garrison, ordered that it be evacuated; that Commandant Heald destroy his guns and ammunition, and withdraw to Fort Wayne.

At 9 o'clock on the morning of August 15, the garrison marched out. It was led by a famous Indian Scout, Captain William Wells, and nine friendly Miami warriors he had assembled upon hearing of the rumored removal to Ft. Wayne. Then came the soldiers, only about 50 in all, and then the women and children.

Along the lake shore they moved, southward, with an escort of Pottawattomies. In another mile or two a shot rang out; then came fierce, desperate fighting, in which the women joined with the men. They fought with butcher knives and anything else that would serve as a weapon, grappling in hand-to-hand struggles with the circling redmen. When it was over, twenty-six soldiers, twelve civilians who had been sworn in as militiamen, two women and twelve children were dead; and many of the fifty or more survivors wounded. Next day the fort was looted; then burned.

Captain Heald was taken prisoner, and was paroled later by the Indians. Among the documents in Old Fort Dearborn, are to be seen the quarterly returns made out by him, one of which records the casualties of the tragic day, another a copy of his parole.

### **The De Saible, or du Sable, Cabin**

Near Old Fort Dearborn you can see a reproduction of the cabin of Chicago's first citizen, Jean Baptiste Point de Saible, who lived on the north bank of the Chicago River, and traded in furs, even before the fort was built. He was a prosperous, educated negro of French extraction. The cabin gave way to what then was considered a mansion, and in it he collected Chicago's first art collection and library. It is thought he established his first cabin in 1777 and left in 1800, to go further south in Illinois.

### **The Marquette Cabin**

And further along, you may visit a cabin erected as tribute to Father Jacques Marquette, who came by boat down the south branch of the Chicago River to Lake Michigan, in 1673.

To keep his promise to the Illinois Indians that he would return to them "within four moons," the brave priest-explorer defied the danger of his exhausted condition, and after his second visit the following winter, died in a little hut in Michigan, by the stream that bears his name.

### **The Life and Lore of Lincoln**

By Old Fort Dearborn stands another stockade of logs, in which are five buildings, each marks an epoch in the upward struggle of Abraham Lincoln.

Here is the tiny, one-room cabin near Hodgenville, Ky., where he was born, and about which he played as a boy. Then the second home he knew, larger, and, to the boy who had known only bitterest poverty, a bit luxurious, on Pigeon Creek in Indiana. Then the little gen-



**Interior—Rutledge Tavern**



Abraham Lincoln's Boyhood Home and the Lincoln-Berry Store

eral store in Salem, Ill., where Lincoln read law, and many of the books that broadened his eager mind; and a tragically tender reminder of his early romance, the Rutledge tavern, where he wooed and won Ann Rutledge, only to suffer so greatly that he contemplated suicide, when she died of pneumonia. Lastly, the Wigwam, where Abraham Lincoln, following his memorable forensic struggles with Douglas, the "Little Giant," emerged as a candidate for the Presidency.

All but the Wigwam are actual reproductions, in size and furnishing, of the structures themselves. The Wigwam is miniature, though a sizeable structure withal. Its original stood at the corner of Lake and Market streets, Chicago.

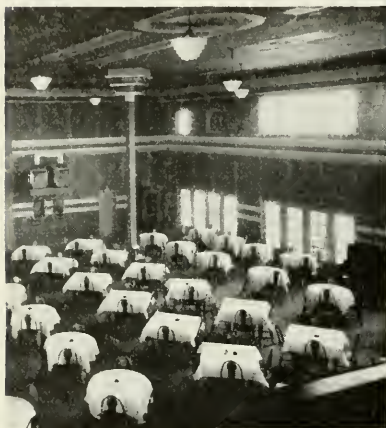
In these buildings you will find furniture of the time of Lincoln, and many mementos of the martyr's career. Among them is a cedar cane which Lincoln whittled for a friend, a hammer he used as a surveyor, articles from the store, which he and William F. Berry ran in partnership, the fire tongs of the original Rutledge tavern, a small trunk and other articles of furniture the immortal Lincoln used. Further interesting studies of Lincoln's life will be found in the Illinois Host building, on the Avenue of Flags.

It is fitting, indeed, that, in an exposition of the progress of a century, the most important man of that century should hold a high and important position. Abraham Lincoln holds that place by right and by acclamation. The story of his life and memorable actions is told in a splendid series of exhibits as an act of reverent homage.



## Eating Places on the Grounds

Regardless of where you may be in the grounds, when hunger calls, there's an answer nearby. There's a wide variety of menus, whether you choose with the eye of the epicure, to eat in leisure, and dance perhaps, or whether in haste you wish only a light repast.



Interior—Mueller-Pabst Cafe

Prices in the Fair, by rule of A Century of Progress, are well within reason, and the eating places, whether elaborate restaurants with entertainment, or sandwich stands, are supervised. You may dine and dance on the cool shore of the lake, or overlooking the peaceful lagoon, or take a bite-and-sip in smaller places where sandwiches and refreshments are served, or eat in the novelty circus tent, or in a desert half-way station of the Southwest or in an early mining camp.

## On the Mainland

Let us say that you are somewhere in the neighborhood of the Administration building, at luncheon or dinner time. Eitel's Rotisserie is at the west end of the bridge across to Northerly Island. A lunchroom for a quick bite, an outdoor dining room on the edge of the lake for a more leisurely dinner. Food is served, too, in the Sears Roebuck building, just across from the Administration building.

On down the Avenue of Flags, to the left, you may dine on Italian food in the Italian pavilion, or just beyond drop into the northwest corner of the Hall of Science, where one of the many Crown Food Century Grills that are scattered throughout the exposition, is found. Or, if you choose Chinese food, across the way from the Hall of Science is the Chinese pavilion, and just a bit south is the Japanese pavilion where you may dine on the food of the Nipponese, cooked by skilled Japanese chefs. Or, turn to your



Interior—Old Heidelberg Inn



left in the Hall of Science, and you may eat in the world's largest drug store.

If you are in the area south of the Hall of Science, you may stop in at Muller's Pabst Cafe, a spacious restaurant with outdoor tables, too. Further on, one of the 25 Downy Flake Doughnut Shops in the grounds offers crispy doughnuts and coffee.



Interior—Edwards' Rancho

Come then to the Streets of Paris, and here is French food, the Café de la Paix may beckon with its invitation to leisurely dining and dancing. There are little sidewalk cafes, also. A bit beyond, Old Heidelberg Inn, with its German cookery and cooled rathskeller and lakefront restaurant. And on the other side of the road, back a little ways, the Belgian Village with its allure of quaintness, and Belgian dishes.

In the midst of the Midway, you may care to dine a la circus folk, in Fisher's Circus Cook-house, or in the Dance Ship,

looking out upon the lake; where 2,000 to 3,000 people can be accommodated. Or here is the Adobe House, where they roast Texas steers and serve them. Again, the Midget Village is a place to dine, where the Lilliputians are the cooks and the waiters. They provide you with food in miniature surroundings, but they guarantee that the portions will not be smaller.

On a ways, and Rutledge tavern, in the Lincoln group, invites you to sit in an atmosphere in a measure hallowed by the memories of the homely great man, for it is an exact reproduction of the inn where Lincoln courted Ann Rutledge before her tragic death.

In the midst of the Home Planning group is the Victor Vienna Garden Cafe, which, in the '93 Fair, was "Old Vienna," and it is operated by the same proprietor.



The Pabst Blue Ribbon Casino

Farther south, near Thirty-first street, is the Cafe de Alex, where you may dine and dance, and then the Ukrainian pavilion in the extreme

south end of the grounds, offers native dishes and old world charm. Here, too, "The Days of '49" offers food in the surroundings of a gold rush camp.

### On Northerly Island

But, let's say you are on Northerly island when appetite keens. Starting at the north end, you may desire the dishes of Poland, which are served in the Polish pavilion, just south of Adler Planetarium. The Dairy building, just beyond, offers food, and by the bathing beach the Beach Dance Pavilion and Restaurant invites. In the Agricultural building is a Swedish lunchroom. Enchanted Island has a restaurant for children. Or go on, if you wish, to Miller's Highlife Restaurant, with all manner of fish dishes. On further, and Schlitz Gardens Restaurant bids to cool, outdoor dining.

Then, lakeward from the Government building, there are picnic grounds, where you can take your own lunches.

South of the Government building, too, is the Pabst Blue Ribbon Casino, with orchestras playing, and College Inn entertainers before radio microphones, and on a revolving stage there are terraces for tables outdoors, spacious dining rooms within, and an outdoor garden seating 2,000.

In addition to these eating places there are scattered through the Fair grounds innumerable sandwich shops, hot dog stands, and specialty concessions where those who wish a hasty snack will find food to please them.

So, the menus are varied, the offerings many, gustatory delights are in every section of the grounds. Dining at the Fair is not a problem.

## General Information for Visitors

In traffic control, in transportation facilities, in housing, in prices, in accurate, courteous guide and information detail and in every way that could be conceived as contributory to the visitor's welfare, the A Century of Progress organization, and the City of Chicago, and the State of Illinois have cooperated to command, or to regulate conditions, wherever possible, in the hope of causing you genuinely to feel that you are being entertained by a hospitable, considerate host.

### The Official Medal



The Official World's Fair Medal is a bronze piece, suitable for keeping as a treasured souvenir, that beautifully expresses the spirit and purpose of A Century of Progress. Its modeling is the work of Emil Robert Zettler, head of the industrial arts section of the Art Institute of Chicago. The first medal struck off was for presentation to President Franklin D. Roosevelt.

On the face of the medal is a strong, swift figure, symbol of energy and action, which represents the intellectual arch between man's resources and man's work. One foot of the figure stands on the pillar of 1833, one on 1933. The words, "Research" and "Industry" give the keynote of the Fair theme. The reverse side of the medal carries a plan of the World's Fair grounds. The medal is in three sizes,  $2\frac{3}{4}$  inches wide,  $2\frac{1}{4}$  inches wide and  $1\frac{1}{2}$  inches wide, and will be for sale on the grounds.

### Information About Transportation

Twenty-five of the thirty-three trunk lines terminating in Chicago operate passenger trains, and approximately 1,500 arrive daily. If you

are one of 60,000,000 people who live within, what is called, Chicago territory, you may leave your home any day, enjoy a delightful dinner on the train, a good night's rest, and begin your enjoyment of A Century of Progress twelve hours after leaving your home. Chicago is the largest railroad center in the world, and 100,000,000 people live within 24 hours' train ride from it.

You will arrive in Chicago at one of six downtown stations, all within easy reach of the Exposition grounds. The railroads of the nation are cooperating with fast and frequent service, and with special rates, to make it easier for you to attend A Century of Progress, and to bring your families.

The rate reductions granted by the railroads depend upon the time limit of the tickets, whether going and return routes are the same, whether stopovers are desired, whether tickets are for individuals or for groups. The charge for round trip tickets ranges from one and one-half of the one-way fare down to less than one-third of the regular fare for groups of 100 adult passengers traveling in coaches with a time limit of three days.

*Every railroad ticket office in the United States is an information bureau. Local ticket agents will give information about travel accommodations, and about the A Century of Progress.*

### **By Bus and by Air**

Bus routes from every section of the United States bring frequent service into Chicago, and a Bus Union Station is on Roosevelt road near Wabash avenue, less than a half mile from the Exposition grounds, with branch depots in various sections of the city. Air service is frequent, Chicago being one of the great aviation centers of the country, and air lines have added to their equipment to give fast service.

Passengers arriving at the Municipal Airport can immediately board amphibian planes and be brought to the Pal-Waukee Airport in the Exposition grounds at Thirty-first street, or be taken by bus or cab to hotels, or downtown points.

### **By Steamer**

Steamers will bring visitors from the principal cities of the Great Lakes, landing at Navy Pier in Chicago. Smaller steamers and motor boats will then bring these visitors to the Exposition.

### **For Those Who Come by Auto**

Fourteen of the main arteries of traffic leading into Chicago are marked, for distances of from 75 to 100 miles, with colorful markers, round in shape, for the guidance of visitors. These highways have been given appropriate World's Fair names, and the signs carry symbols indicative of these names, i. e., Electrical route, regular Nos. 15 and 42 running down through Milwaukee, along Lake Michigan, has the familiar clenched fist closed over lightning flashes; Marine route, regular No.



12, running along the lake, through St. Joseph, Michigan, the naval anchor; Automotive route, regular No. 20 through South Bend, Indiana, the wheel of an auto; International route, regular No. 6 through Walkerton, Indiana, a globe; Science route, regular No. 30 through Valparaiso, Indiana, the Adler Planetarium; Industrial route, regular No. 41 through Kentland, Indiana, a gear; Midway route, regular No. 49, through Kankakee, Illinois, a clown; Agricultural route, regular No. 66 through Dwight, Illinois, and crossing Communication route, regular No. 7 through Ottawa, Illinois, at Joliet, Illinois, a man following a plow. The Communication route carries the symbol of two telephone



Fort Dearborn Route

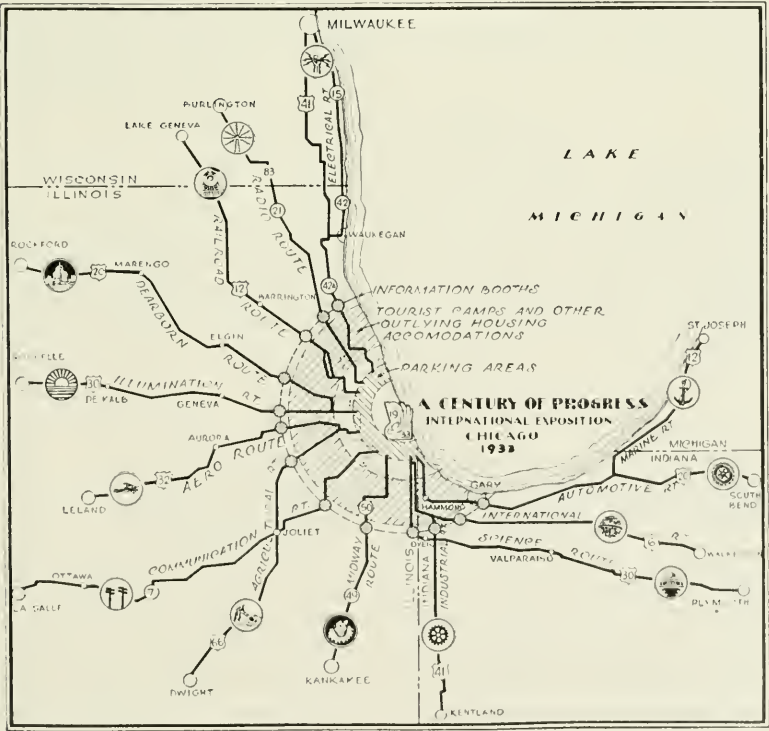


Science Route



Industrial Route

poles strung with wires; Aero route, regular No. 32, through Leland, Illinois, a plane in flight; Illumination route, regular No. 30 through Rochelle, Illinois, the rising sun.



Automobile Roads Marked by a Century of Progress

These markers appear at intervals of from one-tenth to a quarter of a mile. As you come close to Chicago, detour markers appear, indicating the way to different sections of the city.

On the right side of the road handsome information booths appear, with courteous attendants to give information about directions, about hotel accommodations, rooms in private homes or tourists' camps. These are official information booths, plainly marked with the A Century of Progress signs.

Should you be seeking the way to friends or relatives in Chicago, the information clerks will give you minute directions and furnish you with a comprehensive road map.

Further, if you desire, they will direct you to a telegraph station in the district in which the address is, and a messenger boy will take you to your destination for a small fee. Or, if you wish to know about a hotel or apartment or rooms in private homes, the clerk will give you complete information and direct you how to get there or to a telegraph district office, from whence a messenger boy will take you.

## **Hotel and Room Accommodations**

Chicago has an amplitude of housing accommodations, it being estimated that from one-half to three-quarters of a million people can be comfortably cared for daily throughout the life of the Fair. This includes hotels, rooming houses, apartments and rooms in private homes.

The prices for hotel service in first-class hotels range from \$1.50 to \$5 per person a day. The average price for first-class accommodations in the leading hotels is \$3 a day. Meals in most hotels are 50 cents to \$1; meals are served in many places on the grounds; sandwiches and drinks can be bought on the grounds for 10 and 15 cents.

Comfortable, clean rooms in rooming houses and in private homes can be procured for as little as \$1 a day, or less for long stays.

About 20,000 apartments, of from two to five rooms each, are available, making it possible for families, or groups, to take a modern apartment, by the week or month, with the cost per person as little as \$1 a day, or even less, depending on length of stay.

## **Information Agencies**

Persons desiring information about hotel reservations, prices, etc., before coming to Chicago, can write the following:

William J. Hennessey, Chicago Association of Commerce.

Miss Nan F. Dean, Jackson Park Hotel Association, 1642 East 56th street (South Side).

R. L. Vanderslice, North Shore Hotel Association, 520 North Michigan avenue (North Side).

J. K. Blatchford, Chicago Hotel Association, 58 East Congress street (Loop and Downtown District).

There are four housing bureaus which have been approved by A

Century of Progress for the convenience of persons not desiring hotel accommodations. They are:

Visitors' Tourist Service, Inc., Room 1314, 608 South Dearborn street. Telephone, Harrison 5524.

World's Fair Room Listing Bureau, 180 North Michigan avenue. Telephone, Franklin 4080.

National Tourist Service, 310 South Michigan avenue. Telephone, Harrison 1255.

Chicago Herald & Examiner Renting Service, Hearst Square. Telephone, Randolph 2121.

The Visitors' Tourist Service for a fee makes reservations, and provides club rooms in the business district, and free parking space for visitors.

The World's Fair Room Listing Bureau maintains a free information booth in the grounds, in the Sears Roebuck building, at the right of the Avenue of Flags, near the North Entrance, as well as the one in its headquarters uptown, at 180 North Michigan avenue.

The National Tourist Service at 310 South Michigan avenue is operating official tourist information booths located in the outskirts of the city on the World's Fair highways. Every booth will be supplied with a current list of rooms; and, if the visitor desires, he can secure the aid of a Western Union messenger in locating the addresses supplied him.

The Chicago Herald & Examiner Renting Service will publish a weekly renting guide. This guide will be available to Chicago visitors at railway and bus stations, hotels and at over 500 Sinclair filling stations in and around Chicago.

### **Motor Village Tourist Camps**

Seven large motor villages, or auto tourist camps have been approved by A Century of Progress for the convenience of visitors who desire to enjoy this method of living while attending the Fair. The motor villages are located at strategic entrances of main highways into Chicago, north, west, and south, and near high speed electric transportation to the grounds, so that residents may leave their cars, and avoid congestion of traffic to reach the Exposition.

These camps have full police and fire protection, and are under regular inspection for health and sanitation by the State Department of Health, with registered nurses and medical care always available. They are equipped with electric lights, baths and showers, bell boy, porter and maid service, nurseries and playgrounds for children, who may be left with trained attendants, writing rooms, mail service, lounges, rest rooms, public telephones, drug stores, restaurants and candy shops.

In general, rates for tourist cabin accommodations are \$1.00 or \$1.25 per person per night, with cheaper rates for groups and for longer periods of stay. In addition to cabins, officially approved tourist camps also have available areas suitable for tenting at an approximate cost of 50c per night.

The following organizations are operating tourist camps which have been approved by A Century of Progress: Century Cabin Camps, Inc., Suite 900, 7 South Dearborn street; Continental Camp Corporation, 111 West Washington street, and the Fair City Corporation, Room 1600, 100 North LaSalle street, Chicago, Illinois. For details as to rates, these companies should be contacted direct. Locations are:

**Century Cabin Camps:**

123rd street and Ashland avenue.

17th avenue and Broadview.

Milwaukee avenue at Oakton street.

171st street at Dixie Highway.

**Continental Camps:**

Lincoln Highway—211th street, south on I. C. tracks.

**Fair City Corporation:**

City Limits of Harvey, Ill., on Dixie Highway. 147th street on I. C. tracks.

## **Transportation to the Grounds**

Fast and frequent service, by railroad, electric lines, elevated, street car and bus make it convenient for visitors to reach the exposition grounds from any section of the city, or its suburbs. Steamer and motor boat lines parallel these at many points.

### **Buses**

All railroad stations are served by buses direct to the grounds. They carry conspicuous "Direct to Exposition Grounds" signs, and come to the Twelfth Street Vehicular Terminal and to the Eighteenth Street entrance. Fares with free transfers are 10c.

### **Street Cars**

Street car lines come within walking distance of the grounds from all parts of the city. The cars on these lines are plainly marked and patrons will be courteously assisted by conductors in finding their way.

Lines direct to the grounds are being rapidly completed. These will feed into the Twenty-second Street car line, which crosses the Twenty-third Street viaduct and deposits passengers at the Twenty-third Street entrance, and at the Eighteenth Street entrance, from all sections. Fare, without charge for transfers, is 7c.

### **Watercraft**

Motor boats can be taken from many landings in the Chicago river, Lincoln Park and Navy Pier, bringing you to landing places at Twelfth street and at Twenty-third street on the lake side of the grounds. South shore suburbs also are served by speed boat transportation, landing at Thirty-first street. Steamers will also be available from Lincoln Park, Jackson Park and Navy Pier. Speed boat fare from Chicago River is 25c.



## Suburban Trains

The Illinois Central electric suburban trains, from south and southwest suburbs, and stations along the lake on the South Side, disembark passengers conveniently near bridges thrown across its tracks for all entrances to the Fair.

Other railroads operating suburban, and urban services feed into the railroad stations, or convenient points for taking other transportation to the grounds.

Rates within the city limits are governed by distance zones.

## Elevated Lines

Elevated, or Rapid Transit lines from the south, north and northwest sections of Chicago bring passengers to within 2,000 feet of the North entrance (get off at Roosevelt Road station), within 2,800 feet of the Eighteenth Street entrance (get off at Eighteenth street), and within 3,300 feet of the Twenty-third Street entrance (get off at Twenty-second street).

Fares with free transfers are 10 cents.

## Parking

No vehicles except official ones are permitted in the Exposition enclosure. There is but one parking place immediately at the Fair grounds. This is an area lying from Sixteenth street to Eighteenth street, alongside and east of the Illinois Central tracks, with accommodations for approximately 7,000 cars.

Charges throughout the city for parking are reasonable. There are, however, a number of commercial parking areas along the westerly side



A Greyhound Intra-Fair Bus

of the Illinois Central Railroad, within walking distance of the grounds, as well as various garages and parking areas throughout the city, located conveniently near transportation services.

### **Conveniences Within the Grounds**

If you are a stranger in Chicago, and at any time "get turned around" in the city or in the Exposition grounds, it is an easy matter to orient yourself. Remember always that Lake Michigan is east.

When you enter the grounds, transportation is quickly available. Water craft, great, specially built motor buses, wheel chairs, jinrikishas, offer you comfortable means of conveyance.

Sixty Greyhound "auto-liners" whose full capacity each is 100 persons were especially designed and built for service in the grounds. These buses operate for your convenience in two ways. If you enter, for example, at the North entrance, and wish to get speedily to the south end of the grounds, you may board a bus that operates in a fenced-in speed lane for through service, with stops only at the Twenty-third street area, and the Maya Temple area near Thirty-first street. The loading area is at your right as you enter the grounds.

Other buses, leaving from the east side of the North entrance, operate more slowly, going around on Northerly island, and permitting you to reach any point you desire. The seats of the buses lie lengthwise, and face outward, permitting passengers a full view.

### **Lecture Tours**

Gray Line tours will take you through various buildings, and a lecturer will explain points of interest.

### **Wheel Chairs**

Wheel chairs, pushed by college students thoroughly trained to explain features of the Fair, can be employed at a rate of \$1 an hour, for visits anywhere in the grounds. There are 900 of these, and college men were selected from over all the United States to man them.

### **Boats on the Waters**

Colorful launches and Venetian gondolas will ply the waters of the lovely lagoons, providing, in their setting of romantic splendor, especially at night, when the lights lend their charm, opportunity for hours of drifting delight and marvelous views, and at the same time furnish transportation from the North entrance to Twenty-third street, to points on Northerly island and the Fair's mainland.

### **Boy Scouts Service**

Boy Scouts are on duty throughout the grounds, ready to speed messages, help to find lost children and in any way serve visitors according to the Boy Scout code of courtesy. There is a Boy Scout camp near the U. S. Government Building on Northerly island, with

105 Scouts in attendance at all times. Altogether, 2,800 of the boys are assigned to service for the Fair.

### **Picnic Grounds**

The Fair has set aside a large area just south and east of the U. S. Government building as a picnic grounds. Visitors can take their lunches to the grounds, either as individuals or in large groups. The grounds are on the lake front, the conveniences are free. The Boy Scouts' camp is adjacent.

### **Places to Rest**

The buildings of the Fair have rest rooms with modern conveniences. Thousands of gayly colored chairs and benches, scattered throughout the grounds, offer you opportunity to rest as long as you will.

### **Attendants**

All guides of the Fair are trained, courteous attendants, and each is equipped to give you full information about A Century of Progress. Apply to them with any complaints, or any request as to directions, or information concerning any of the buildings.

### **Information Booths**

A Century of Progress has provided a series of information booths throughout the Exposition grounds. These booths are located in the Exposition buildings, concession areas and at other accessible points. The attendants are at your service and are prepared to assist you in locating any exhibit, restaurant or amusement within the grounds.

The Exposition's Lost and Found Service is conducted through the facilities of the Information Service. Any article lost can be reported to any booth attendant and any article found should be turned in to them. After a reasonable period of time, if the owner does not claim it, it will be returned to the finder.

Attendants in the information booths are qualified to give you information about the places of interest and amusement in Chicago, such as churches, parks, museums, theaters, race-tracks, night-clubs, etc.

At the information booths, any visitor who desires assistance in locating lodging accommodations will be directed to such sources of this information as have been recognized by the Exposition management.

### **Admission Prices**

Admission price to the grounds is fifty cents for adults and twenty-five cents for children between the ages of three and twelve years. Non-transferable season tickets, providing 150 admissions, may be purchased for \$15.

The general gate admission will admit you to all the exhibit buildings constructed by A Century of Progress, which includes:

(1) Radio and Communications Bldg., (2) Dairy Bldg., (3) Elec-

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Walter G. Caldwell —  
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E. M. Brunette  
Jerry Fox

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J. H. Carroll  
E. G. Smith  
Carlton William Mauthe  
Geo. A. Nelson  
Wm. D. Thompson  
Paul A. Hemmy  
Gustav A. Dick  
J. L. Barchard—Director

### PUERTO RICO

Honorable Jas. R. Bev-  
erley — Governor of  
Puerto Rico  
William A. D'Egilbert—  
Commissioner  
J. H. Cerecedo—Special  
Representative of Gov-  
ernment of Puerto Rico

## LIST OF FAIR EXHIBITORS

Below is a list of the exhibitors and the building in which each will be found, in A Century of Progress. The total of exhibits runs into the thousands, as in many cases one exhibitor may have a large number of exhibits.

### — A —

#### Abbott Laboratories

A vitamin exhibit demonstrating the vitamins for pharmaceutical and biological products for medicinal use—Hall of Science.

#### Addressograph Multigraph Corporation

Addressing, letter-writing, and office equipment—General Exhibits Group, Pavilion 3.

#### Advance Pattern & Foundry Company

An exhibit of iron and steel products—Home Planning Hall.

#### Agfa Ansco Corporation

A photographic service, photographic supplies, and film—General Exhibits Group, Pavilion 2.

#### Ahlberg Bearing Company

An eighteen-foot cast in the ceiling of a display featuring ball-bearings—Travel and Transport Building.

#### Alemite Corporation

A demonstration of alemite lubrication with a cutaway chassis as a special feature—Travel and Transport Building.

#### Allen, Edgar

Exhibit of human eggs and ovarian hormones—Hall of Science.

#### Allied Mills

Showing machinery for the processing of foods, grains and flour, and an exhibit of products—Agricultural Building.

#### Alouf, M.

Imported French jewelry, drugs and perfumery—General Exhibits Group, Pavilion 4.

#### Altorfer Brothers Company

A large turntable demonstrating ABC washing machines, ironers and spinners, also a model laundry completely equipped—Electrical Group.

#### Altorfer Brothers Company

Exhibit of a washing machine and an iron in one of the model houses in the Home and Industrial Arts Group.

#### Amateur Radio Exhibit Association

An exhibit showing the actual making of simple receivers, transmitters, and other radio apparatus and their use staged by the World's Fair Amateur Council—Travel and Transport Building.

#### Amend, Fred W.

Showing the manufacture of Chuckle Jelly Beans, and a display of confectionery—Agricultural Building.

#### American Asphalt Paint Co.

Exhibit of aluminum and asphalt paints—General Exhibits Group—Pavilion 1.

#### American College of Surgeons

Telling the story with portraits and dioramas, and historical objects of the progress in surgery in America in the last one hundred years as a part of the Medical Display—Hall of Science.

#### American Colortype Company

An exhibit showing the processes of colortype printing and a display of equipment—General Exhibits Group, Pavilion 2.

#### American Committee for the Control of Rheumatism

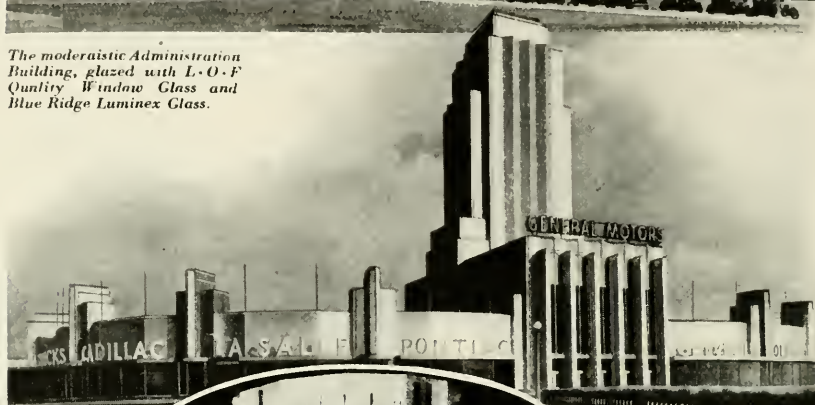
A display in connection with the Medical Section showing the advancement made in the treatment of arthritis—Hall of Science.

#### American Evatype Corporation

A display showing the manufacture of rubber stamps in the General Exhibits Group, and another display manufacturing small name plates for homes in Home Planning Hall—General Exhibits, Pavilion 3.

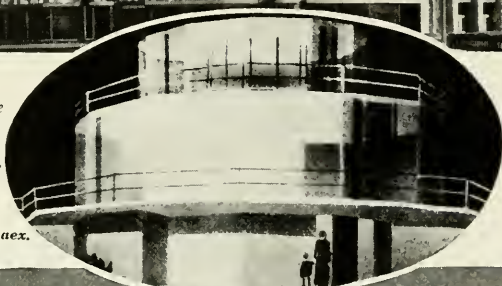


*The modernaist Administration Building, glazed with L-O-F Quality Window Glass and Blue Ridge Luminex Glass.*



*The huge General Motors exhibition building, glazed with L-O-F Polished Plate Glass and "A" Quality Window Glass.*

*The "George Frederick Keck" house, all-steel, L-O-F Polished Plate Glass, and Blue Ridge Luminex.*



*The Electrical Building—all store fronts are L-O-F Polished Plate Glass.*



*The Stran-steel Good Housekeeping house, glazed with L-O-F Polished Plate Glass throughout.*

L-O-F Polished Plate Glass and Quality Window Glass have been used in glazing a majority of the World's Fair buildings.

LIBBEY · OWENS · FORD GLASS COMPANY, TOLEDO, OHIO, manufacturers of Highest Quality Flat Drawn Window Glass, Polished Plate Glass and Safety Glass; also distributors of Figured and Wire Glass manufactured by the Blue Ridge Glass Corporation of Kingsport, Tennessee.



LIBBEY · OWENS · FORD  
QUALITY GLASS



**American Express Company**

An exhibit of its travel, financial and foreign shipping services—Hall of Science.

**American Face Brick Association**

An exhibit of wall and shelter—Special Building.

**American Gas Association**

Demonstration of gas-fired boilers and heating system—Home Planning Hall.

**American Gladiolus Society**

Gladiolus garden—Special Buildings.

**American Heart Association**

Prevention of heart disease — Hall of Science.

**American LaFrance & Foamite Industries, Inc.**

A display of motor fire apparatus, and fire extinguishers—Travel and Transport Building.

**American Library Association**

Hospital library—Hall of Science.

**American Medical Association**

Story of medicine from days of saddle-bag doctor to the present.

**American Metal Crafts Co.**

Jewelry—novelties—trophies, etc.—General Exhibits, Pavilion 4.

**American Optical Company**

Exhibit of all types of optical instruments —Hall of Science.

**American Pharmaceutical Association**

American pharmacy—Hall of Science.

**American Radiator and Standard Sanitary Corp.**

A building—Special Building.

**American Railway Association**

A display of standard railway crossing and stop signals, showing the development of these safety appliances in rail-roading—Travel and Transport Building.

**American Rolling Mill Co.**

Steel enamel house—Special Building.

**American Society for the Control of Cancer**

History of treatment of cancer—Hall of Science.

**American Steel Foundries**

A display showing the development of the Railroad Car Cupper, and of railway safety in the past one hundred years—Travel and Transport Building.

**American Stove Company**

A diorama showing the development of the kitchen, with modern kitchens featuring the Magic Chef gas ranges—Home Planning Hall.

**American Telephone & Telegraph Company**

An extensive display designed to aid the story of communication as told in the Radio & Communication Building. It includes telephone and other communication apparatus and teletype writers and telephone switchboards—Electrical Building.

**American Urological Association**

Development of urological instruments and treatment—Hall of Science.

**American Walnut Manufacturing Ass'n**

Use of plywoods, and veneers in fine cabinet woods—General Exhibits Group.

**Anderson Expeller**

Extraction of oil from soy beans—Agricultural Group.

**Anest, George A.**

An exhibit of automobiles and trailers, in their application to world touring—Travel and Transport Building.

**Ansell Simplex Ticket Company**

A printing display showing the printing of machine tickets and roll tickets—General Exhibits Group, Pavilion 2.

**Anthracite Institute**

An exhibit showing a model of a modern fuel conveyor, and a machine for emptying ashes—Home Planning Hall.

**Architectural Guild of Small Home Design**

An exhibit showing the modern trend in the architecture of small and economical homes—Home Planning Hall.

**Armstrong Brothers Tool Co.**

An exhibit of tools for various trades—General Exhibits Group, Pavilion 1.

**A. Arouani, K. Arouani, Garbeil Hakim**

Historical exhibit—General Exhibits Group Pavilion 4.

**Associated Cooperage Industry of America**

Showing the manufacture of many kinds of barrels, kegs and staves, with a varied exhibit of products—Agricultural Building.

**Association of Manufacturers of Chilled Car Wheels**

A dynamic exhibit showing how molten metal is poured for the forming of car wheels by means of a model, and illustration—Travel and Transport Building.

**Atlantic & Pacific Tea Co., The Great**

Display of A & P Products and distribution in connection with amusement features—Special Building.

**Atlas Brewing Company**

A miniature brewery, showing the process of beer making with mural paintings depicting the raising of hops, malt, and other brewing ingredients —Agricultural Building.

**Ayer Company**

Vitamins—Hall of Science.

**— B —****Bakelite Corporation**

Exhibit of Bakelite—Hall of Science.

**Baker & Company Ink, Inc.**

An exhibit of platinum—Hall of Science.

**Baldwin Piano Company**

A display of pianos—General Exhibits, Pavilion 3.

**Ball Brothers**

A display showing the process of conserving fruits and vegetables, and exhibit of modern containers—Agricultural Building.

**Baltimore & Ohio Railway**

A display of railway equipment, and scenic exhibits—Travel and Transport Building.

**Barber-Greene Company**

Display of tractor—outdoor area—Travel and Transport Building.

**Barrett Cravens Company**

An exhibit of lift trucks and portable elevators—General Exhibits Group, Pavilion 1.

**Barrett, C. E., & Company**

A display of the assembly of fountain pens—General Exhibits Group, Pavilion 4.

**Baumgarten, Joseph**

An exhibition of portraiture—General Exhibits Group, Pavilion 2.

**Bausch & Lomb Optical Company**

A display of lenses—Hall of Science.

**Beloit College (Logan Museum)**

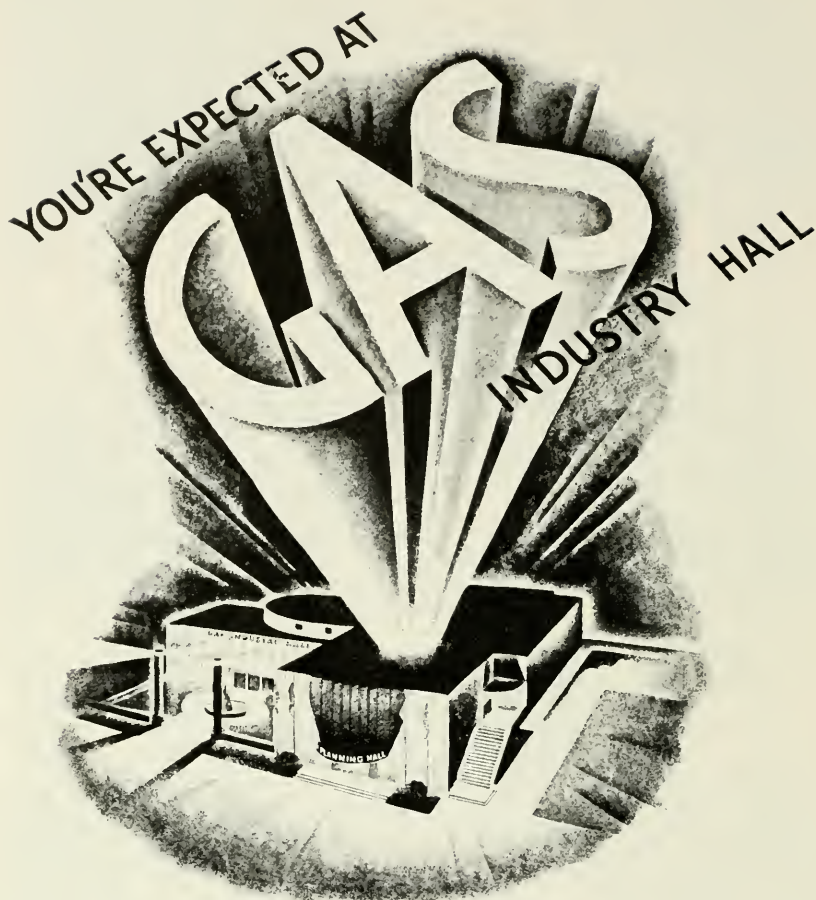
An exhibit of educational methods, co-operative with the educational theme of the social sciences—Hall of Social Science.

**Berland Shoe Stores, Inc.**

A display of shoes, and other modern footwear—General Exhibits Group, Pavilion 4.

**Birtman Electric Company**

An exhibit of electrical appliances and devices—Home Planning Hall.



Here you will see a gas flame freeze water into ice cubes, giant burners that make the thermometer shoot to 3000°F. and other graphic portrayals of A Century of Progress in the gas industry.

Modern, automatic gas service has completely transformed the heating tasks of home and industry. It has introduced economies and leisure hitherto unknown. It

has made possible the livable basement. It has created a new art in cookery. And it has introduced silent refrigeration, an uninterrupted supply of hot water and other up to the minute conveniences.

Gas Industry Hall adjoins Home Planning Hall, located on Leif Eriksen Drive between the 23rd Street & 31st Street entrances to the grounds. We shall be expecting you.



## AMERICAN GAS ASSOCIATION

420 Lexington Avenue, New York, N. Y.

**Blumenthal & Company, Sidney**

A display of rich velvets and other pile fabrics—General Exhibits Group, Pavilion 5.

**Book House for Children**

An elaborate display with scenic effects of the company's volumes for children—Hall of Social Science.

**Borg-Warner Corporation**

A display of automotive household, agricultural, marine, and industrial products featured by an illuminated glass paneled automobile, demonstrating the parts manufactured by the company—Travel and Transport Building.

**Bosch, Fr. E.**

An exhibit of electrical apparatus brought from Dusseldorf, Germany—Electrical Building.

**Boy Scouts of America**

A display showing the ideals and the growth of the Boy Scouts' organization in America—Hall of Social Science.

**Boye Needle Company**

A display of needles, notions, kitchen ware and accessories—Home Planning Hall.

**Boyer Chemical Laboratory Company**

A display of perfumes—General Exhibits Group, Pavilion 4.

**Brinks Express Company**

An exhibit demonstrating the use of trucks for the transfer of money in large quantities—Travel and Transport Building.

**Bristol-Myers Company**

A display of a giant toothpaste tube—General Exhibits Group, Pavilion 4.

**Brunswick-Balke-Collender Co.**

A display of billiard room and recreation equipment featuring two bars, and historical collection of billiard cues—General Exhibits Group, Pavilion 1.

**Bryant Heater & Manufacturing Company**

Installation of a gas-fired boiler—Home Planning Hall.

**Builders Iron Foundry**

A display of meters—General Exhibits Group, Pavilion 1.

**Burpee Can Sealer Company**

A display of canning processes—Agricultural Group.

**Burroughs Adding Machine Company**

A display of business machines—General Exhibits Group, Pavilion 3.

**Burroughs-Welcome Company**

A display of pharmaceutical and biological material—Hall of Science.

**Burton-Dixie Corporation**

An exhibit of mattresses and feathers—Hall of Science.

## — C —

**Caic, Thomas J., & Co. of Illinois**

A display Book of Knowledge—General Exhibits Group, Pavilion 2.

**Canada, Dominion of**

A display of tourism, industry and handy work—Travel and Transport Building.

**Cardozo, Leo**

A display of jewelry—General Exhibits Group, Pavilion 3.

**Carnegie Steel Company**

An exhibit of the latest railway steel on which fast trains are sent—Travel and Transport Building.

**Case, J. I., Company**

An exhibit of automobiles and trucks—Travel and Transport Building.

**Catholic Church Extension**

A display of a Pullman car equipped to conduct religious services—Special Building.

**Central States Dahlia Society**

Dahlia garden—Special Building.

**Century Dairy Exhibit, Inc.**

The large dairy building on Northerly Island near Adler Planetarium houses the exhibits of this branch of the agricultural industry as told by a dairy and its products—Agricultural Group.

**Century Electric Company**

A display of electrical appliances and devices—Electrical Building.

**Century Homes, Inc.**

A display of house and garage—Special Building.

**Chappel Brothers, Incorporated**

An exhibit showing manufacture of bird and dog foods—Hall of Science.

**Chesapeake and Ohio Railroad**

Miniature models of trains and principal stations—Travel and Transport Building.

**Chicago & Northwestern Railway**

A display of the early pioneer engine, and other exhibits telling its history—Travel and Transport Building.

**Chicago Board of Health**

An exhibit showing the remarkable improvement in health conditions in Chicago—Hall of Science.

**Chicago Bridge & Iron Works**

A display of steel storage tanks—General Exhibits Group, Pavilion 1.

**Chicago, Burlington & Quincy Railway**

A display of the company's history, and that of railroading—Travel and Transport Building.

**Chicago Camera Club**

An exhibit of modern photography—General Exhibits Group, Pavilion 2.

**Chicago Centennial Dental Congress**

A display contributing to the story of the science of medicine—Hall of Science.

**Chicago Faucet Company & Fiat Metal Co.**

A display of metal shower bath compartments, and valve and shower head combinations—Home Planning Hall.

**Chicago Flexible Shaft Company**

A demonstration of electric irons, kitchen mixers, and toasters—Home Planning Hall.

**Chicago Medical Society**

Historical exhibit of medicine in Chicago.

**Chicago, Milwaukee, St. Paul & Pacific Railroad**

The largest electric engine in the world—Travel and Transport Building.

**Chicago Pharmacal Company**

Manufacturing process of making tablets—Hall of Science.

**Chicago, Rock Island & Pacific Railway Co.**

A display featuring a "talking map," describing the Golden State Limited route to California, and the Rocky Mountain Limited route to Colorado—Travel and Transport Building.

**Chicago Society of Miniature Painters**

A colorful exhibit of miniature paintings—General Exhibits Group, Pavilion 2.

**Chicago Tuberculosis Institute**

Story of tuberculosis—Hall of Science.

**Christian Science Publishing Society**

Christian Science Reading Room—Special Building.

THE LEADER IN A CENTURY OF PROGRESS  
OF REFRIGERATION

# NEW AIR-COOLED ELECTROLUX

## THE *Gas* REFRIGERATOR

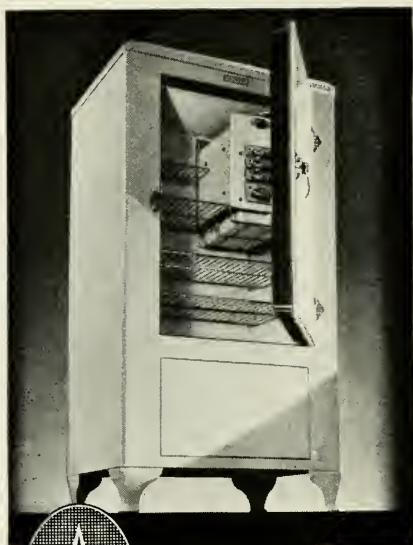
**Lowest Operating Cost  
Permanent Silence  
Freedom from Repairs  
Gas Company Service**

WHATEVER you look for in an automatic refrigerator, you'll find it in the New Air-Cooled Electrolux. And you'll find MORE! A vital advance in the science of home refrigeration makes the New Electrolux an even finer, simpler, more satisfying refrigerator than ever before developed.

The New Air-Cooled Electrolux has no moving parts—no belts, no motors, no fans—to wear or cause noise. It uses no water. A tiny gas flame does all the work. Circulates the refrigerant which produces constant steady cold . . . plenty of ice cubes. No wonder, therefore, that the New Air-Cooled Electrolux is absolutely silent, is the *most* economical refrigerator you've ever heard of. And no wonder that it can be depended on to give carefree, trouble-free refrigeration now . . . and after years of use.

But inspect the New Air-Cooled Electrolux for yourself! It's on display in Home Planning Hall and at your local gas company. Representatives are on hand at all times to explain its amazing operation to you.

Even though you may not be contemplating the purchase of an automatic refrigerator right now, you'll



USES NO WATER

REG. U.S. PAT. OFF.

want to see this greatest refrigeration achievement of modern engineering skill. Money cannot buy a finer refrigerator! Yet the price of the New Air-Cooled Electrolux is sealed to 1933 pocketbooks—may never again cost as little to own. Electrolux Refrigerator Sales, Inc., subsidiary of Servel, Inc., Evansville, Ind.

★ ★ ★

Other Servel refrigeration products on display at Home Planning Hall are:

SERVEL HERMETIC REFRIGERATOR  
SERVEL CRUSADER REFRIGERATOR  
SERVEL COMMERCIAL EQUIPMENT

**SEE IT ON DISPLAY HOME PLANNING HALL**



- Christie-Moor, Madame Winifred**  
Double keyboard piano—Hall of Science.
- Chrysler Sales Corporation**  
Products—Special Building.
- Clark Tractor Company**  
A display of vehicles powered by gas—Travel and Transport Building.
- Cleveland Clinic Foundation**  
A display contributing to the medical section story with motion pictures showing the constituents, formation and growth of human cells and glands and use of the X-ray—Hall of Science.
- Clipper Belt Lacer Company**  
An exhibit of belt lacing machines, and belting materials—General Exhibits Group, Pavilion 1.
- Clover Leaf Crystal Shops**  
Crystal engravers shown at their benches, engraving beautiful designs on crystal ware—General Exhibits Group, Pavilion 4.
- Cluett, Peabody & Company**  
Showing of a large diorama portraying the way that shirt collars, underwear, handkerchiefs, and cravats are manufactured—General Exhibits Group, Pavilion 5.
- Coca-Cola Company**  
Demonstrating the actual making of Coca-Cola—Agricultural Group.
- Collier, P. E. & Son Distribution Corporation**  
Distributor of magazines—Hall of Social Science.
- Committee on Livestock and Meat Exhibit**  
Collective exhibit of livestock production and meat packing.
- Common Brick Manufacturers Association of America**  
Model Home—Special Building.
- Companies Exhibit Commission of 1933**  
A vast display showing the production, distribution and utilization in every phase of power with a 90-foot diorama and other striking displays in the Electrical Building.
- Compton & Company, F. E.**  
Exhibit of children's dictionaries—Hall of Social Science.
- Conover Company**  
A demonstration of dish-washer sinks—Home Planning Hall.
- Container Corporation of America**  
Testing of boxes and scientific packaging—Agricultural Group.
- Continental Scale Works**  
Scales—Home Planning Hall.
- Cook, M. B., Company**  
Exhibit of carbon paper, ribbons—General Exhibit Group, Pavilion 3.
- Co-Operative Exhibit of Air Passenger Lines**  
Showing the remarkable advance made in aviation passenger transportation—Travel and Transport Building.
- Copeland Products, Inc.**  
Display of electrical refrigerator—Home Planning Hall.
- Copper & Brass Research Association**  
An elaborate display of copper, brass, bronze, and other copper alloy, showing their uses in utensils, in buildings, in ships, and industrial and home uses—General Exhibits Group, Pavilion 1.
- Copps Brothers and Zook, Inc.**  
An exhibit of custom built cabinets in the Florida House—Home and Industrial Arts Room.
- Cord Corporation**  
An exhibit of automobiles and airplanes—Travel and Transport Building.
- Costumers Association of Chicago**  
General Exhibits Group, Pavilion 4.
- Coyne Electrical School**  
An exhibit of the teaching of electricity—Electrical Building.
- Crane Co.**  
Electrically operated valves—Special Building.
- Crowe Name Plate & Manufacturing Company**  
Display of metal specialties and souvenirs—General Exhibits Group, Pavilion 1.
- Cruver Manufacturing Company**  
Advertising specialties of metal, glass, and celluloid—Hall of Science.
- Cudahy Packing Company**  
A display of home meat packing—Home Planning Hall.
- Cuneo Press, Inc.**  
A display of the processes of printing and engraving in actual workshops and the Gutenberg press brought from a German museum a principal feature—General Exhibits Group, Pavilion 2.
- Curtis Lighting, Inc.**  
Electric lighting—Electrical Building.

## — D —

- Deagan, J. C., Inc.**  
A carillon of bells—Hall of Science.
- Dearborn Engraving Company**  
Display of Waite engraving machine from England—General Exhibits Group, Pavilion 2.
- Delaware and Hudson Railroad Corporation**  
Murals and maps showing scenic route of the Delaware and Hudson with relief maps of the Hudson Coal Company—Travel and Transport Building.
- Delta Manufacturing Company**  
Showing the progress made in small power driven machines found in the homes, workshops, schools and small experimental laboratories—Electrical Building.
- DeLugach, Frank**  
Display of tooth paste—General Exhibits Group, Pavilion 4.
- Dentists Supply Company of New York**  
An exhibit showing the art and progress of the making of porcelain teeth and dental accessories—Hall of Science.
- Der Metalfunk Aktiengesellschaft, Zurich**  
Home Planning Hall.
- Diamond Braiding Mills**  
Electrical machines and appliances—Electrical Building.
- Diamond Exhibit Company**  
A diamond mine in operation and showing the polishing and treatment of the gem with one million dollars in gems and a \$500,000 diamond a feature—General Exhibits Group, Pavilion 4.
- Dick, A. B., Company**  
An exhibit showing the development of the stencil, showing duplications with various mimeograph machines, printing and accessories—General Exhibits Group, Pavilion 3.
- Dickson-Jenkins Manufacturing Company**  
A display of riding breeches—General Exhibits Group, Pavilion 5.



## From outdoor pumps to luxurious baths in A Century of Progress

A hundred years ago a king's ransom could not buy the luxuries of modern plumbing and heating that are within reach of all.

Even the bathrooms and kitchens of the "Gay 90's" look crude today. They are shown in striking contrast with the latest fixtures in the Crane exhibit of plumbing and heating in the Home Planning Section at the Exposition. In the model homes, Crane bathrooms offer many artistic suggestions to those who are planning to build or modernize.

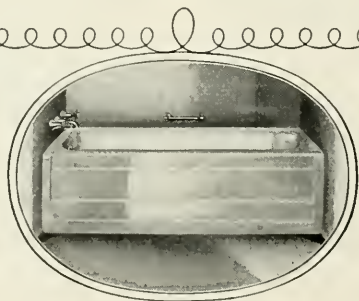
Those industrially inclined will be interested in the large electrically operated and illuminated panel in the Electrical Building that shows the function of Crane materials in the progress of transportation, power, production, manufacturing, and the development of natural resources.

To these exhibits, Crane Co. invites you most cordially.

# CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO  
NEW YORK: 23 W. 44TH STREET

*Branches and Sales Offices in One Hundred and Sixty Cities*



### Dictaphone Sales Company

A modern office exhibit demonstrating dictation by dictaphone with accessory transcribing and shaving machines—General Exhibit Group, Pavilion 3.

### Diebold Safe & Lock Company

An exhibit of electrically operated fire resistance safes, burglar safes, and tear gas equipment—General Exhibits Group, Pavilion 3.

### Diener-Dugas Fire Extinguisher Corporation

A display of fire apparatus—Hall of Science.

### Dieterich Steel Cabinet Corporation

A display of steel cabinets and office equipment—Home Planning Hall.

### Dietzgen Company, Eugene

A display of drafting, surveying instruments and reproduction equipment—Hall of Science.

### Donnelley, R. R., & Sons Company

A colorful modernistic exhibition of varied products of the press ranging from small cards and display of advertising matter to catalogues, telephone directories, encyclopedias, books and magazines—General Exhibits Group, Pavilion 2.

### Drucker, August E., Company

Exhibit showing the manufacture of Revolution tooth powder—Hall of Science.

### Duke, Dr. W. W.

Allergy and physical allergy—Hall of Science.

### Duplicate Bridge Supply Company

A display of duplicate bridge scoring devices—Hall of Science.

## — E —

### Eastman Kodak Company

A display of photographic apparatus and film and photographic service—Hall of Science.

### Eastman-Kuhne Galleries

A photographic display showing art in the home—Home Planning Hall.

### Edison General Electric Appliance Company, Ltd., Inc.

Displaying installation of electric range and water heater in the "model house" in the home and Industrial Art area—Home Planning Hall.

### Edison, Thomas A.

Life work of Thomas A. Edison—special building.

### Electrical Central Station Committee

Electricity in the home, farm, commerce, industry and outdoor use—Electrical Building.

### Electric Storage Battery Company

Showing the uses of various types of oxide batteries, featuring a section of the oxide battery used by Admiral Byrd on his Antarctic Expedition—Electrical Building.

### Elgin National Watch Company

A reproduction of an observatory showing how time is taken. Also an exhibit of aviation instruments and watches and the machines for making time pieces. Features a large model 100 times the size of a strap watch. The Elgin Company also has time bells at entrances to the grounds—General Exhibits Group, pavilion 4.

### Erickson, Hubbard H.

An exhibit of comptometers—General Exhibits Group, pavilion 3.

### Erwin Wasey and Company, Ltd.

Special building—Thermometer Tower—Indian Refining Company products.

## — F —

### Farmers National Grain Corporation

A story of cooperative marketing of grain shown as a part of the Social Science story of man's rise—Hall of Social Science.

### Fearn, Kate

French embroidery and leather tooling by machine—General Exhibits Group, pavilion 4.

### Federal Electric Company

Demonstrating the filling and bending of Neon tubes and electric fountain—Electrical Building.

### Federal Products Company

Display of precision gauges for laboratory and testing equipment—Hall of Science.

### Felt & Tarrant, Manufacturing Company

Motion pictures showing comptometers service, and a display of comptometer parts and adding and calculating machines—General Exhibits Group, pavilion 3.

### Fiat Metal Company and Chicago Faucet Company

Plumbing fixtures—Home Planning Hall.

### Firestone Tire & Rubber Company

A demonstration of the processes of tire and rubber manufacturing—Hall of Science.

### Fisher, Howard T.

A display of kitchen cabinets—Home Planning Hall.

### Florida, State of

Special building—Model house.

### Formfit Company

A display of corsets—General Exhibits Group, Pavilion 5.

### Formica Insulation Company

Formica treatment of entrance to Home Planning Hall.

### Foster, C. H.

An exhibit of electrical massaging machines—Electrical Building.

### Fox Furnace Company

Exhibit of furnaces and heating apparatus—Home Planning Hall.

### Foxboro Company

Exhibit of precision gauges and testing devices—Hall of Science.

### Franco-American Hygienic Company

Exhibit of cosmetics—General Exhibits Group, pavilion 4.

### Frigidaire Corporation

A display of refrigerators and cooling apparatus—Home Planning Hall.

### Fuller Brush Company

Display of brushes of all kinds for home and personal use—Home Planning Hall.

### Funk & Wagnalls Company

Display of publications and of pictorial covers of Literary Digest, with a display showing the sources used in editing the Literary Digest and a mechanism demonstrating standard dictionary definitions—General Exhibits, pavilion 2.

## — G —

### Gaertner Scientific Corporation

A display of precision instruments for verner measurements and high grade optical instruments and dividing machines—Hall of Science.

### General American Tank Car Corporation

A display of railroad tank cars for the hauling of liquid and dry bulk commodities including milk, packers beef, and a dry flow automatic unloading car—Travel & Transport Building.

*On the Midway . . .*

## LIVING WONDERS

Largest collection of strange and  
curious people ever assembled.

Human mistakes and mishaps.

Siamese Twins.

## GIANTS FROM THE FOUR CORNERS OF THE EARTH

*Adults, 25 Cents*

*Children, 15 Cents*



## OLD PLANTATION SHOW

*60 Hand-Picked  
Colored Entertainers*

Hottest Colored Band from Dixie.

Singers, Comedians and Dancers.

Fastest Moving, Fastest Stepping

Show ever put together.

*Adults, 25 Cents*

*Children, 15 Cents*

Both Shows Operated by

THE DUKE MILLS CORP.



### General Electric Company

A display of the companies' dish washers and sinks in the Electrical Building and a display of electrical appliances in Home Planning Hall.

### General Electric Kitchen Institute

A display of the installation of kitchen range and sink in one of the homes in the Home and Industrial Arts Group.

### General Electric X-ray Corporation

An exhibit of selected radiographs showing the applications of the x-ray in the fields of medicine, dentistry, science and industry—Hall of Science.

### General Food Sales Company, Inc.

An exhibit of food stuffs, packing and handling—Agricultural Building.

### General Houses, Inc.

A display of a model house—Special Building.

### General Motors

A display of the assembly of cars—Special Building.

### General Steel Castings Corporation

A display of steel castings—Travel & Transport Building.

### Georgia Warm Springs Foundation

An exhibit showing the remarkable results obtained in the treatment of infantile paralysis in the institution founded by President Roosevelt—Hall of Science.

### Gerber Products Company

Motion Pictures showing the proper preparation of strained vegetables for infant feeding and for special diets—Hall of Science.

### Gerts Lumbard & Company

Displaying the processes of the manufacture of varnish and wall brushes from the raw material to the finished product—Home Planning Hall.

### Gibbs & Company

General Exhibits Group, pavilion 4.

### Gibson Refrigerator Company

An exhibit of refrigerators and cooling devices—Home Planning Hall.

### Gilkison, E. P., & Son Company

Travel and Transport Building.

### Ginn & Company

Showing the interior of an old-fashioned school and of the colonial one-room school, and featuring a rare collection of old school books, some dating as far back as Shakespeare's time—Hall of Social Science.

### Glidden Company

Showing the planting, growing, and cultivation of soy beans and the processes of extraction of the oil which is used in more than 50 products—Agricultural Building.

### Good Housekeeping

The interior decorations for the Strand Steel house in the Home and Industrial Arts Building.

### Good Will Industries of Chicago

A display showing the accomplishments of the handicap—Hall of Science.

### Goss Printing Press Company

A display showing the operation of the printing press—General Exhibits Group, pavilion 2.

### Gray Line Sight-Seeing Company

A consolidated ticket office for sight seeing tours of the Fair Grounds and of the City—Hall of Science.

### Grenfell Association

A display of pictures and rugs—Social Science Building.

### Gro-flex Corporation

General Exhibits Group, pavilion 4.

### Guisasola, F.

A display of jewelry—General Exhibits Group, pavilion 4.

### Gulf Refining Company

A display of miniature oil fields featuring a cutaway model showing oil lubrications, and a cockpit of a modern airplane—General Exhibits Group, pavilion 2.

## — H —

### Hamilton Beach Manufacturing Company

An exhibit of electrical mixers—Home Planning Hall.

### Hammond Clock Company

A display of electric clocks—Electrical Building.

### Hanovia, Chemical & Manufacturing Company

A demonstration of therapeutic, ultra-violet and infra-red lamps—Hall of Science.

### Hansen, Chris, Laboratories

A demonstration of the making and serving of junket desserts made with junket flavor, and featuring the company's Junket Folks—Agricultural Building.

### Harvard Medical School & Massachusetts General Hospital

Exhibits co-operating in telling the story of medical science in the Medical Section—Hall of Science.

### Harnischfeger Corporation

A display of publications and fine books in rare bindings, modern and medieval—General Exhibits Group, Pavilion 1.

### Harrington & King Perforating Co.

A display of perforated metal—Home Planning Hall.

### Hayden Chemical Corporation

Hall of Science.

### Heart O' The Lakes Association

Exhibit of historical data and trophies from region—Travel and Transport Building.

### Heintz, H. J., Company

A display of food products—Agricultural Building.

### Heller and Sons

Monogram sets and home darning sets—Home Planning Hall.

### Henry, M. R.

General Exhibits Group, Pavilion 4.

### Hertzberg, Ernst & Son

Book binding and leather goods—General Exhibits Group, Pavilion 2.

### Hess Warming and Ventilating Company

Exhibit of steel furnaces, and filter units—Home Planning Hall.

### Hild Floor Machine Company

Electrically operated floor scrubbing and waxing machines—Hall of Science.

### Holland Furnace Company

An exhibit of air condition systems, heating systems, and heat regulators—Home Planning Hall.

### Holt, J. W. Plumbing Co.

Plumbing—General Exhibits, Pavilion 1.

### Hoosier Manufacturing Company

A display of kitchen cabinets—Home Planning Hall.

### Hoover Company, The

A display of vacuum cleaners—Home Planning Hall.

### Houck, John D.

Water filtration—Home Planning Hall.

### Household Finance Corporation

An elaborate exhibit showing the changes in family financing in the last one hundred years, and featuring "the smallest motion picture machine in the world"—Hall of Social Science.

# Contributing to...



## world business Progress

**B**USINESS executives are cordially invited to attend the exhibition of International Business Machines in the General Exhibits Building at the Century of Progress. Here you will see, in action, the machines which are saving time, money and materials for Business and Government in seventy-eight different countries throughout the world.

Watch the International Sorting Machines in action. Those machines are sorting 400 cards per minute. Operate the Automatic Reproducing Punch and the Electric Accounting Machines. The International Electric Accounting Method, of which these machines are a part, enables an executive to have a detailed, up-to-the-minute fact-picture of any phase of his business—at any time.

You will also be interested in the International Self-regulating Time System. One master controlling time source keeps every clock and time recorder, in the entire system, right up to the minute.

Particular attention should also be given to the displays of International Industrial Scales, Dayton Moneyweight Scales and Store Equipment. See the new Dayton Customeread Scale which gives the customer the proof of the price.

*The intricate accounting work of the Fair is being done on International Electric Tabulating and Accounting Machines. Throughout the entire Exposition, accurate, coordinated time is assured by the International Time System.*

**International Business**



**Machines Corporation**

General Offices:  
270 BROADWAY, NEW YORK, N. Y.

Branch Offices in All the  
Principal Cities of the World

**Hovden Food Products Corporation**  
Pacific Coast sardines and tuna—Agricultural Building.

**Hynson, Westcott & Dunning, Inc.**  
Showing the process of preparing mercurchrome, and other form of cuticle specialties—Hall of Science.

— I —

**Ilg Electric Ventilating Company**  
Demonstration of the cooling by refrigeration and the air control of the Brick Manufacturers Association House in the Home and Industrial Arts area—Home Planning Hall.

**Illinois Bell Telephone Company**  
An exhibit of telephone, switchboards, and communication apparatus—Home Planning Hall.

**Illinois Catholic Historical Society**  
Special Building—Marquette Cabin.

**Illinois Central Railroad**  
An exhibit showing dramatized floor map miniature Illinois Central train in operation, mural paintings, motion pictures, and stereopticon views—Travel and Transport Building.

**Illinois Commercial Men's Association**  
Slides and talking machine showing the value of insurance—Hall of Social Science.

**Illinois, State of,**  
Exhibits in the Agricultural Building, the Hall of States, and in the Hall of Social Science, and the Illinois Host House near the north entrance on the Avenue of Flags.

**Illinois Steel Company**  
Steel and its uses—General Exhibits Group, Pavilion 1.

**Index Sales Corporation**  
A display of office supplies and indexing methods—Hall of Science.

**Indian Village**  
Special Building.

**Inland Steel Company**  
An extensive exhibit for the United States Steel Company of the production of steel, with an elaborate mural showing various phases of steel uses—General Exhibits Group, Pavilion 1.

**Institut Pasteur**  
Life and Work of Louis Pasteur—Hall of Science.

**International Association of Lions Clubs**  
Showing the development of the organization, and illustrating its work—Hall of Social Science.

**International Business Machines Company**  
A display in a setting of a Grecian temple of the history of business machines—General Exhibits Group, Pavilion 3.

**International Friendship Exhibit, Inc.**  
Hall of Social Science.

**International Harvester Company**  
An outdoor demonstration of the uses of farm machinery, featuring the operation of a tractor controlled by radio in area just south of Travel and Transport Building; also an exhibit of machinery and implements in the Agricultural Building.

**International Nickel Company**  
Home Planning Hall.

**International Telephone & Telegraph Company**  
Radio, telegraph, and telephone—Electrical Building.

**Iodent Chemical Company, Inc.**  
Illustrating Iodent Tooth Paste and Tooth Brushes with an exhibit visualizing scientific value of diet—Hall of Science.

**Iron Fireman Manufacturing Company**  
An exhibit of burners under fire, and an animated display of the performance of controls by means of Neon tubes—Home Planning Hall.

**Iwan Bros.**  
Post hole diggers and hardware specialties—Travel and Transport Building.

— J —

**Johansson, C. E., Inc.**  
(Division of Ford Motor Company)  
An exhibit of Johansson block gauges and accessories used in world standard gauging system—Hall of Science.

**Johns-Manville Corp.**  
Special building—Home Industrial Arts Group.

**Johnson & Son, S. C., Inc.**  
An exhibit showing the production and development of floor and furniture wax—Hall of Science and Home Planning Hall.

**Johnson Chair Company**  
General Exhibits Group, Pavilion 3.

**Johnson Motor Company**  
(Thompson Bros. Boat Mfg. Co., T. & T.)  
Display of motor boats and outdoor motors.

**Judy Publishing Company**  
An exhibit of books and publications dealing with the care, management, training, and breeding of dogs—General Exhibits Group, Pavilion 1.

— K —

**K & W Rubber Corporation**  
Rubber mats, cushions, table pads and rubber novelties—General Exhibits, Pavilion 4.

**Kalamazoo Vegetable Parchment Company**  
Demonstrating the manufacture of vegetable parchment paper for the wrapping of solid and semi-solid food stuffs—Agricultural Building.

**Karpen, S., & Bros.**  
An exhibit of furniture and home furnishings—General Exhibits Group, Pavilion 3.

**Karr, Chas., The, Co.**  
An exhibit of mattresses—Home Planning Hall.

**Kelvinator Corporation**  
A display of refrigerators and cooling devices—Home Planning Hall and Electrical Building.

**Kendall Company**  
(Bauer and Black) pharmaceutical supplies—Hall of Science.

**Kerr Glass Manufacturing Corp.**  
Reproductions of early types of equipment used for the preservation of food in the home, and a demonstration of the modern use of glassware and food preservation—Agricultural Building.

**Keuffel & Esser Company**  
A display of surveying and measuring instruments—Hall of Science.

**Kewashkum Aluminum Company**  
A display of utensils—Home Planning Hall.

**Kitchen Maid Corporation**  
Exhibit of kitchen cabinets—Home Planning Hall.

**Koch Robert Institute**  
An exhibit in the Medical Section dedicated to the life and work of Robert Koch, the discoverer of the tubercle germ—Hall of Science.

**Kochs, Theodore A., Company**  
An exhibit of barber chairs, supplies, and accessories—General Exhibits Group, Pavilion 4.



# PETRO-NOKOL

## 1903 AUTOMATIC OIL HEAT 1933

Gold Medal 1915

PAN-AMERICAN EXPOSITION - San Francisco

Chosen In 1933

FOR CENTURY of PROGRESS - Chicago



PETROLEUM HEAT & POWER CO., Stamford, Conn.

*"World's oldest and largest oil heating organization"*

# NEON

Ninety-five per cent of the gaseous tube lighting at A Century of Progress was installed by Federal Electric Company, pioneer in the development of gaseous tube signs and illumination. The Hall of Science, Federal Building, Electrical Building, Dairy Building, General Exhibits Building and others . . . all are illuminated by Federal. Why not identify your business with a Federal gaseous tube electric sign and enjoy the added sales and profits that it will bring? For details write or phone.

# FEDERAL

ELECTRIC COMPANY

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CHICAGO ILLINOIS



**Kohler Company**  
Plumbing, heating and electrical equipment—Special Building.

**Kreicker, Lou W.**  
Exhibit of stamps—General Exhibits Group, pavilion 2.

**Kraft Phoenix Cheese Corporation**  
An extensive exhibit showing the actual processes of the making of mayonnaise, with each step depicted—Agricultural Building.

**Kroch's Bookstores, Inc.**  
A display of rare old books and of unusual bindings and of specially selected types of typography—Hall of Social Science.

**Kroehler Manufacturing Company**  
Decorating and furnishing of Armco-Ferro Enamel House—Home Planning Hall.

## — L —

**LaSalle Extension University**  
A demonstration of the stenotype, a machine for shorthand reporting—General Exhibits Group, pavilion 3.

**Lebolt & Company**  
An exhibit of jewelry—General Exhibits Group, pavilion 4.

**Libby McNeill & Libby Company**  
Diorama depicting the sources of various Libby foods, and showing salmon canning, olive orchards, pineapple plantations, evaporated milk condensary, peach orchard, and beef cattle grazing on western plains—Agricultural Building.

**Life Insurance Century of Progress Exhibit Committee**  
A large display featuring a 60-foot moving diorama showing the economic importance of life insurance, and how insurance money is distributed—Hall of Social Science.

**Link Belt Company**  
Portraying the use of modern conveying equipment, with pictures of plants and warehouses—General Exhibits Group, pavilion 1.

**London, Midland & Scottish Railway of Great Britain**  
T. & T.—The Royal Scot.

**Long, W. E., The, Company**  
(Agents for Proteo Foods, Inc.)  
Diabetic bread and development of science on baking—Hall of Science.

**Loyola University, School of Medicine**  
An exhibit cooperating with the story of the Medical Section, and showing specimens and drawings dealing with the human body—Hall of Science.

**Lullabye Furniture Corporation**  
An exhibit of furniture, and home furnishings for infants—General Exhibits Group, pavilion 3.

**Lyon Metal Products Company, Inc.**  
A display of bridge tables and chairs—Hall of Science.

## — M —

**Maduras, Julius D.**  
An exhibit of rotary motors—Electrical Building.

**Mallinckrodt Chemical Company**  
An exhibit demonstrating the use of ether as an anaesthesia—Hall of Science.

**Marquette University, School of Medicine**

An exhibit cooperative with the story of the Medical Section—Hall of Science.

**Marshall Field Mills Corporation**  
Home Planning Hall.

**Masonite Corporation**  
Showing an exhibit of house and garage—Special Building.

**Massey-Harris Company**  
Travel and Transport Building.

**Master Lock Company**  
A general exhibit of padlocks, hasp locks, and keys—General Exhibits Group, pavilion 1.

**Maternity Center Association**  
Hall of Science.

**Mayo Clinic**  
An exhibit cooperative with the Medical Section showing the treatments of certain diseases, particularly that of goiter—Hall of Science.

**McGill University**  
Pictorial exhibits including a diorama, photographs, and transparencies of the development of McGill University and the life of Sir William Osler—Hall of Science.

**McGraw-Hill Publishing Company**  
General Exhibits Group, pavilion 2.

**Medical Dental & Allied Science Women's Association**  
An exhibit stressing the care of mothers and children—Hall of Social Science.

**Merck & Company, Inc.**  
An exhibit of drugs and medical supplies—Hall of Science.

**Merriam, G. C., & Company**  
Dictionaries—Hall of Social Science.

**Milwaukee, City of**  
Diorama of water system and harbor, and exhibits showing activities of the Milwaukee Public Health Service—Hall of Science.

**Milwaukee Public Museum**  
Hall of Science.

**Minneapolis-Moline Power Implement Company**  
Travel and Transport Group.

**Miracul Wax Company**  
An exhibit of dri-brite floor wax, with an animated demonstration by a "Miracle Magician"—Home Planning Hall.

**Missouri, Kansas & Texas Railroad**  
Exhibit showing the development of the southwest served by this line—Travel and Transport Building.

**Modern Woodmen of America**  
Activities of organization—Hall of Social Science.

**Moore, John C. B.**  
Special Building—House.

**Morgan, C. G.**  
Showing the manufacture of rubber stamps—Hall of Science.

**Morton Salt Company**  
A scale model of a modern evaporating salt plant, and showing the manufacturing process of cube and flake salt—Agricultural Building.

**Mueller, V., & Company**  
Hall of Science.

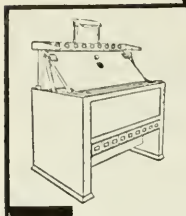
**Muellermist of Illinois**  
The installation of the sprinkling system in Home Planning Hall.

**Municipal Tuberculosis Sanitarium**  
Showing the history and phases of work of this Chicago Institution—Hall of Science.

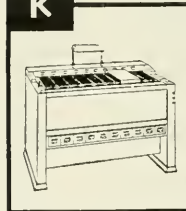
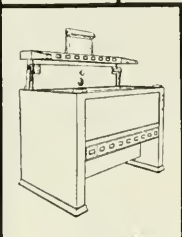
## — N —

**National Biscuit Company**  
Displaying a miniature biscuit factory, and showing the processes which are involved in biscuit making—Agricultural Building.

# See the World's *First* **ELECTRIC Safe**



**RECORDS**



**In Case of Fire---Just Push the Button and Run**

See this safe in operation. It combines convenience with certified fire protection for records. Booth 15, Third Pavilion, General Exhibits Building.

Here also are shown the latest methods for preventing loss of records, money and wealth from fire, burglary and hold-up.

*Manufacturers of complete protection equipment from the largest bank vault to the smallest home safe.*

## **DIEBOLD**

**SAFE & LOCK CO., Canton, Ohio**

*Over Seventy Years of Protection Service*

### **NORTH-EAST-WEST-SOUTH**

*You'll Find The*

## **"OVERHEAD DOOR"**

REG. U.S. PAT. OFFICE

### **SALES and SERVICE**

**DISTRIBUTORS EVERYWHERE**



The "Overhead Door" is correctly engineered, faithfully serviced and honestly constructed. It is used on old as well as new buildings. When opened, it is completely up and out of the way. When closed, it fits tightly at top, sides and bottom. Remember---each "Overhead Door" is backed by a nationwide sales service organization of skilled door engin-

ers. Call your distributor near you. Please realize the merits of The "Overhead Door" and inspect the exhibit

houses in the Home and Industrial Arts Group at A Century of Progress, where The "Overhead Door" is installed on the garages. The "Overhead Door", hangar type, size 40 by 10, is featured on "The House of Tomorrow" --- See it.



### **OVERHEAD DOOR CORPORATION**

**HARTFORD CITY, INDIANA, U. S. A.**

Made in Canada by Overhead Door Company of Canada, Limited, Toronto 3, Ontario

© 1933, O. H. D. Corp.

**National Cash Register Company**

A historical and modern display of cash registers, and accounting and bookkeeping machines, with a diorama showing the company's original workshop, and its plant today—General Exhibits Group, pavilion 3.

**National Commission for Propaganda and Defense of Havana Tobacco**

General Exhibits Group, pavilion 2.

**National Council of Women of the United States, Inc.**

An exhibit featuring a large mural—Hall of Social Science.

**National De Saible Memorial Society**

An exhibit of the life of De Saible—Special Building.

**National Lumber Manufacturers Ass'n**

An exhibit of house and garage—Special Building.

**National Oil Products Company**

An exhibit showing the processing of petroleum products—Hall of Science.

**National Poultry Council**

An exhibit of poultry—Special Building.

**National Pressure Cooker Company**

A demonstration of cooking by high temperature in aluminum cookers, and of domestic candy operations—Agricultural Building.

**National Railways of Mexico**

The President's palatial train with a rare collection of jewels as one of the features, on tracks in the outdoor area south of the Travel and Transport Building.

**National Society of the Daughters of the American Revolution**

A room furnished in Colonial style and serving as a meeting place for the Society's membership—Hall of Social Science.

**National Standard Company**

Showing wire craft in portable direct and indirect lamps—Hall of Science.

**National Sugar Refining Company of New Jersey**

Showing the production and uses of syrup, and showing the various uses of sugar aside from the domestic—Agricultural Building.

**National Terrazzo and Mosaic Ass'n., Inc.**

Scientific geological exhibit pertaining to origin and occurrences of Travertine and Onyx—Special Building.

**New York Central Railroad**

A display of maps and dioramas, and models of trains—Travel and Transport Building.

**New York City Cancer Committee**

Showing the progress which has been made in the control and treatment of cancer—Hall of Science.

**Noble & Company, F. H.**

(Jewelry, souvenirs and novelties, etc.)—General Exhibits Group, Pavilion 4.

**Norfolk & Western Railway Company**

An exhibit of coal and transportation—General Exhibits Group, Pavilion 1.

**Norge Corporation**

An exhibit of electric refrigerators and washing machines—Electrical Building—Home planning.

**North American Car Corporation**

A car exhibit—Travel and Transport Building.

**North, Dorothy**

An exhibit of creative arts by children in some of the famous Vienna schools of art—Hall of Social Science.

**Northbrook Gardens, Inc.**

Peony garden—Special Building.

**Northwestern Improvement Company**

An exhibit of geological resources of Northwest Canada—Hall of Science.

**Northwestern University Medical School**

An exhibit cooperative with the Medical Section dealing with medical and surgical science—Hall of Science.

**— O —****O'Cedar Corporation**

A display of liquid polish and polishing appliances—Home Planning Hall.

**Oliver Farm Equipment Company**

Tractor—Travel and Transport Building.

**Olsen, Tinius Testing Machine Co.**

An exhibit of machinery for testing machines and equipment and implements—General Exhibits Group, Pavilion 1.

**Otis Elevator Company**

The modern escalators from the first to second floors for free riding by the public—Travel and Transport Building.

**Overhead Door Corporation**

Overhead doors and hanger doors—Home Planning Hall.

**Owen Brothers of London**

General Exhibits Group, Pavilion 4.

**Owen, James W. Nurseries**

Landscaping—Special Building.

**— P —****Packard Motor Car Company**

An exhibit designed to show a finality in beauty of the modern automobile, with motion pictures of the Packard proving ground, precision manufacture, and the International Harmsworth Motorboat Races—Travel and Transport Building.

**Palmer, A. N., Publishing Company**

The history of hand writing shown with specimen alphabets and a mural—Hall of Social Science.

**Pan-American Airways, Inc.**

A showing of the growth of airplane traffic between the Pan-American countries—Travel and Transport Building.

**Paper Foundation, The**

An exhibit representing the kinds of paper, and their application to personal and industrial uses. The display features a two-room bungalow, called "A House of Paper," displaying every known use of paper in the home—General Exhibits Group, Pavilion 2.

**Peabody Coal Company**

An exhibit featuring a large monolithic section of an Illinois coal vein 8 feet high, 30 feet long, and 20 feet deep. Inside of this is a reproduction of an underground mine room—General Exhibits Group, Pavilion 1.

**Pennsylvania Railroad**

An exhibit featuring the cab of the Pennsylvania's largest locomotive which can be mounted by visitors, with miniature reproductions of modern equipment. In the outdoor area "The Pioneer" engine of days before the Civil War is shown beside today's giant locomotive—Travel and Transport Building.

**Peoples Gas Light & Coke Company**

An exhibit of gas heaters, and other kitchen appliances—Home Planning Hall

**P. E. O. Sisterhood**

Headquarters for members—Hall of Science.

**P. E. O. Sisterhood**

Progress, education and organization—Hall of Social Science.

**Petroleum Heat & Power Company**

Exhibit of petro and nokol oil burners—General Exhibits Group, Pavilion 1.

**Petroleum Industries Exhibit Committee**

Petroleum products with animated models portraying the history of petroleum and the oil industry—Hall of Science.





## • FREE SAMPLE •

You are invited to visit our exhibit on the ground floor of The Hall of Science, sign our guest register and we will present you with a complimentary sample of Revelation Tooth Powder.

# RECOMMENDED BY Dentists AND Physicians

FOR A

## Quarter of a Century

Revelation Tooth Powder positively cleanses and whitens the teeth and assures a healthy condition of the gums. Absolutely safe because it is free from grit and contains no glycerine or harmful acids. The use of Revelation and frequent consultations with your dentist will eliminate future trouble and expense. Sold by all reliable drug and department stores throughout the world. Two sizes, 35c and the 50c economy size.

## Revelation TOOTH POWDER

Made by August E. Drucker Company  
San Francisco, Cal.

# THE HOUSE OF DAVID

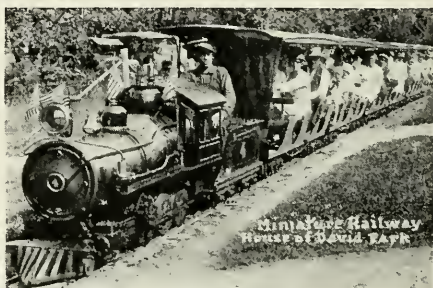
## of Benton Harbor, Mich.

### WORLD FAMOUS:

**FOR** its summer resort Park visited annually by a quarter of a million tourists. Miniature trains and play grounds for the children. Cottages and hotel accommodations. Aviary and Zoo. Daily afternoon and evening concerts, July 1st to September 4th. Open air dance pavilion. Daily free vaudeville.

**FOR** its Traveling Baseball Club now touring the United States. Watch the big dailies for their appearance in your locality. Write for bookings.

**FOR** its Vaudeville Bands, now playing this season for the benefit of the House of David Park guests at the House of David Park, Benton Harbor, Mich., on U. S. 12, two and one half hours



Miniature Trains at House of David Park

auto distance from Chicago.

**FOR** its Souvenir and Art Department. Visit the booth of the House of David at the Century of Progress Exposition in Chicago. This Exhibit is located on the 23rd street bridge.

**FOR** Literature of the House of David, and information relating to Hotel and Cabin accommodations, address, House of David, Box 477, Benton Harbor, Michigan.



**Petrolagar Laboratories, Inc.**  
Scientific and medical equipment and supplies—Hall of Science.

**Pharma-Craft, Inc.**  
Cosmetics—General Exhibits Group, Pavilion 4.

**Phoenix Hosiery Company**  
A demonstration of a machine in operation 45 feet long and capable of manufacturing 24 single full-fashioned stockings at one time; also a display showing various processes required in the manufacturing of hosiery — General Exhibits Group, Pavilion 5.

**Pittsburgh Equitable Motor Company**  
An exhibit of gas, water, gasoline and oil meters, pressure regulators and lubricated plug valves — General Exhibits Group, Pavilion 1.

**Pogltisch Art Brush Works**  
A display of art brushes for painting and decorating—Home Planning Hall.

**Poll, Mrs. Ray**  
Ironing boards—Home Planning Hall.

**Poor and Company**  
A display of railroad supplies with models of tracks and couplings—Travel and Transport Building.

**Porcelain Enamel Institute**  
A display which shows the actual fusing of porcelain enamel into metal, and featuring a "parade of porcelain soldiers" in colors of red, white, and blue—General Exhibits Group, Pavilion 2.

**Pullman Company, The**  
A display which includes "Number Nine," the first pullman ever built, and new pullman cars of 1933, all aluminum with stream lines — Travel and Transport Building.

**Pure Oil Company**  
A display featuring an illuminated relief map showing geographical location of petroleum operations and a chart showing various crude oils produced by the oil industry—General Exhibits Group, Pavilion 1.

— Q —

**Quaker Oats Company**  
Quaker Oats and scones—Agricultural Building.

**Quarrie & Company, W. E.**  
An exhibit of publications—General Exhibits Group, Pavilion 2.

— R —

**Radcliffe College Club of Chicago**  
Showing the New England background, and the beginning of college education for women in the United States—Hall of Social Science.

**Radio Corporation of America**  
Occupying a large portion of the radio section of the Radio and Communication Building on Northerly Island, and showing a wide range of radio phases—Electrical.

**Railway Express Agency, Inc.**  
A display of paintings showing developments of express services—Travel and Transport Building.

**Ramsey, M., & Company**  
An exhibit of cultivators, and spring tooth drags—Travel and Transport Building.

**Rasmussen, Mrs. George**  
A Danish exhibit—Travel and Transport Building.

**Reliance Mfg. Co.**  
Manufacture of textile into clothing—General Exhibits Group, Pavilion 5.

**Religious Exhibits Committee**  
Progress through religion—Special Building.

**Revere Copper & Brass, Inc.**  
An exhibit of kitchen utensils—Home Planning Hall.

**The Reynolds Exhibits Corporation, The Reynolds Appliance Corporation, and The Reynolds Displamor Corporation**  
These organizations have exhibits of a large number of businesses in eight different buildings of the Fair. The following are their exhibitors:

Ackerman Johnson  
Allaire Woodward Company  
American Automatic Electric Sales Co.  
American Bird Products, Inc.  
American Drug Company  
American Gut String Mfg. Co.  
American School Association  
Andis Clipper Company  
Andrea Du Val Laboratories, Inc.  
The Apex News & Hair Company  
Arabian Toilet Goods Co.  
Arcady Farm Milling Company  
Art Science Press  
Associated Silver Company  
Atlas Novelty Candy Company  
Autopoint Company  
The Band Tex Company  
B & B Shoe Company  
Bead Chain Company  
Beckhard Manufacturing Company  
Bechwe Laboratories, Inc.  
The Bell Company  
Dr. C. H. Berry  
Berryman Oil Burner Company  
Bi-Lateral Fire Hose Company  
Bolta Rubber Comb Sales Corp.  
Boone Bell, Inc.  
Bostitch Sales Company  
Brearley & Company  
Brevolite Lacquer Company  
Bronson Reel Company  
The Brown Company  
Bryan Steam Corporation  
Bryant & Stratton College  
B. H. Bunn Company  
Burkland Manufacturing Company  
Burnetts, Inc.  
E. Burnham, Inc.  
Buscarlet Glove Company  
California Perfume Company  
Cameron Surgical Specialty Company  
Celanese Corp. of America  
Cenol Company  
Chas. J. Kuntz & Co., Inc.  
Chicago Pulley & Shafting Company  
Chicago Roller Skate Company  
Chicago School of Chiroprody  
Chicago Technical College  
Dr. Geo. W. Clayton  
Cohan Roth & Stiffson  
College of Advanced Traffic  
College Preparatory School  
Columbia Bank Note Co.  
Columbian Steel Tank Company  
Columbus Chemical Company  
Condon Bros. Seedmen, Inc.  
The Congress Hotel Company  
W. B. Conkey Company  
The Conley Company  
Leo C. Connelly  
Coopers, Inc.  
Correct Form of Chicago  
Coty, Inc. of New York  
Countour Hosiery Mill  
Craftsman Wood Service Co.  
Crescent Manufacturing Co.  
J. B. Crofoot Company  
Crystal Pure Candy Company  
Cupples Company  
Dr. A. Reed Cushion Co.  
Davidson Banking Company  
The Davis Company  
R. U. Delapenha & Company, Inc.  
Denver Guepirt Company  
L. H. Des Isles  
De Van Laboratories, Inc.  
Diet Aid Sales Company  
Dodson Manufacturing Company  
H. A. Douglas Mfg. Co.  
Duplan Silk Corporation  
Earnshaw Knitting Company  
Elder Manufacturing Company  
Elmo, Inc.  
Engel Art Corners Mfg. Co.  
Enna Jettick Shoes, Inc.  
Estelle Dress Company  
Eureka Cement Co.  
Evans Case Company  
Evr Klean Seat Pad Company  
Floret Products Co.  
Foell Packing Co.  
The Peter Fox Sons Company  
The Fraxgar Company  
Franco American Hygienic Company  
Friedman Specialty Company  
Fuller-Warren Company  
Furst-McNess Company  
General Hosiery Company

## Reynolds—Continued

General Paint & Varnish Co.  
Gerrard Company, Inc.  
Gibbs Board Tile Company  
Glascok Bros. Mfg. Co.  
Goeltz Confectionery Co.  
Goes Lithographing Company  
Goldsmith Bros.  
Graceline Handbags, Inc.  
Granny Sales Company  
The Griffiths Laboratories, Inc.  
G. T. Grignon  
Guey Sam  
C. S. Hammond & Co.  
The Harmony Company  
Harriett Hill Preparations, Inc.  
M. Herzog  
The Hubinger Company  
Mme. Nellie Huntingford  
Huth & James Shoe Company  
The Hygienic Products Co.  
Ideal Baby Shoe Company  
Ideal Shoe Mfg. Co.  
Illinois Surgical Supply Co.  
Illinois Testing Laboratories  
The J. B. Inderteiden Company  
International Register Company  
W. J. Jamison Company  
Jarman Shoe Company  
Johnson & Johnson  
Lois Jean Johnstone  
Joseph Adels & Sons  
The E. P. Juneman Corp.  
Justrite Manufacturing Co.  
Kabo Corset Company  
Kaempfer's  
Karith Chemical Company  
The Kaynee Blouse Company  
Kerner Incinerator Co.  
Kinacamps  
H. C. King & Son  
Kingham Trailer Company  
F. N. Kistner Company  
L. B. Kleinert Rubber Co.  
Knight Slipper Mfg. Co.  
Lakeside Packing Company  
The H. D. Lee Mercantile Company  
Joseph Letang  
Limehouse Caie  
Linco Products Corp.  
Lincoln-Schluter Company  
Litsinger Motor Car Co.  
Madam Love  
Macksoul Importing Co.  
Macwhyte Company  
Maiden Form Brassiere Co., Inc.  
Maier Lavaty Company  
Manchester Silver Company  
D. C. Manufacturing Co.  
Master Paper Box Company  
The Match King, Inc.  
Maurice's Restaurant  
Maxant Button & Supply Company  
Maybelline Company  
Mears Radio Hearing Device Corp.  
Meisler Fur Company  
Metropolitan Business College  
Michael, Maksik & Feldman  
Midway Chemical Company  
Robert H. Miller  
Model Brassiere Co.  
Mon Doctors Importing Company  
Morris White Mfg. Co., Inc.  
National Carton Company  
National College of Chiropractics  
National College of Education  
National Life Insurance Co.  
National Plan Service, Inc.  
Nestor Johnson Mfg. Co.  
Northern Electric Company  
Northwestern Yeast Company  
A. J. Nystrom Company  
M. O'Brien & Sons, Inc.  
Old Monk Olive Oil Company  
Olerich & Bery Company  
Oriental Shoes-Ying Co.  
Edward H. Pasmore  
John I. Paulding Co., Inc.  
Perfection Biscuit Co.  
The Permutit Company  
Peters Machinery Company  
Phoenix Manufacturing Company  
Picard, Inc.  
Plochman & Harrison  
Polrette Corsets, Inc.  
Presto Gas Manufacturing Co.  
Edw. V. Price  
Rapaport Brothers  
Rawplug Company, Inc.  
Ray Schools  
The Regensteiner Corporation  
Reynolds Displamor Corporation  
Reynolds Exhibits Corporation  
Reynolds Printasign Corporation  
James H. Rhodes & Co.  
W. S. Richards  
John J. Riddell, Inc.  
Robertson Davis Company  
Roma Macaroni Manufacturing Co.  
F. Romeo & Company, Inc.  
Sam Rosenbaum & Sons Co.

Roseth Corporation  
Peter Rossi & Sons  
Royal Neighbors of America  
Rudolf Thomas  
Savage Brothers  
Paul Schulze Biscuit Company  
Sengbusch Self Closing Inkstand Co.  
The Sheperd Worsted Mills  
Siren Mills Corporation  
J. P. Smith Shoe Company  
Snappy Curler Company  
Herman Soellner, Inc.  
Southern Biscuit Co.  
Specialty Brass Company  
Sperry Candy Company  
Spurgin Manufacturing Co.  
Starrett School  
Stearns Electric Paste Co.  
Stetson Shirt Co., Inc.  
Sunny Croft Hatchery  
Sylvia Neuman, Inc.  
The Tablet & Ticket Company  
W. A. Taylor Company  
Teepie Shoe Company  
Teetophone, Inc.  
The New England Glass Works  
The Stouse Adler Company  
Thompson Manufacturing Co., Inc.  
Tolpin Studios  
Uncas Mfg. Co.  
United Autographic Register Co.  
Unity Manufacturing Company  
Vic-Bo Laboratories  
Civbridge Lamp Company  
Victor Surgical Gut Mfg. Co.  
Vincennes Packing Corporation  
Vogler-Schillo Company  
Vogue Brassiere Mfg. Co.  
Waage Manufacturing Company  
Waldeyer & Betts  
Geo. I. Walleau, Inc.  
Walton School of Commerce  
Western Military Academy  
Weyenberg Shoe Manufacturing Co.  
White Cross Cream Company, Inc.  
Will & Baumer Candle Co.  
The D. T. Williams Valve Co.  
Wullschlegel & Company  
Zion Institutions & Industries  
The Zoro Company

## Rittenhouse, H. J.

An exhibit of garage door equipment—  
Travel and Transport Building.

## Ritter Dental Manufacturing Company, Inc.

A scientific dental display of equipment  
with operatory and diagnostic rooms—  
Hall of Science.

## Rochester Traffic Signal Corporation

A display of traffic signal apparatus—  
Travel and Transport Building.

## Rhode, Gilbert

An exhibit of house decoration—Home  
Planning Hall.

## Rosenwald Fund, The Julius

Rural Negro education—Social Science  
Bldg.

## Rostone, Inc. & Indiana Bridge Co.

An exhibit of model homes—Special  
Bldg.

## — S —

## Safety Glass Mfg. Assn.

An exhibit of varied types of safety  
glass including the shatterless glass for  
automobiles—Travel and Transport Bldg.

## Sanford Mfg. Co.

An exhibit of writing inks, library paste,  
solvent, type cleaner, and school inks  
and paste—General Exhibits Group, Pa-  
vilion 3.

## Sangamo Electric Co.

A pictorial display of the development  
of electric meters, time switches, flash-  
ers, and other electrical appliances—Elec-  
trical Bldg.

## Sasson, Albert

Perfumes and jewelry—General Exhibits  
Bldg., 4th Pavilion.

## Schmidt, Mrs. Minna

An exhibit featuring more than 400 fig-  
urines, representing outstanding women  
of the world, and costumes of various  
periods—General Exhibits Group, Pavil-  
ion 5.

**Scholl Mfg. Co. Inc.**  
Foot appliances and arch supports, etc.—Hall of Science.

**Sconce, Harvey J.**  
Growing exhibit showing the genetics of rainbow corn—Agricultural Bldg.

**Scriptex Press**  
An exhibit of showing process of printing of "personalized" stationery and envelopes—General Exhibits Bldg., Pavilion 2.

**Searle, G. D., & Co.**  
Arsenicals and bismuth—Hall of Science.

**Sears Roebuck & Co.**  
General exhibit of Sears Roebuck's products—Special Bldg.

**Servel Sales, Inc.**  
Refrigerators—Home Planning Hall.

**Sherman, Beatrix**  
Exhibit of silhouettes—General Exhibits Bldg., 4th Pav.

**Simoniz Company**  
An exhibit depicting the manufacture of Simoniz and the application of Simoniz products to automobiles—Hall of Science.

**Sinclair Refining Co.**  
An exhibit consisting of structures, fixtures and court—prehistoric animals—Special Bldg.

**Singer Mfg. Co.**  
A display of vacuum cleaners and of sewing machines—Home Planning Hall, Electrical Bldg.

**Slye, Maud**  
An exhibit of pathological studies—Hall of Science.

**Sloane, W. & J., Inc.**  
Model house—Special Bldg.

**Smith College**  
A mural of Smith College with a bal-  
optician telling the history of this famous woman's school—Hall of Social Science.

**Smith, Thomas E.**  
The interior decoration in the "Roston House" in the Home and Industrial Arts area—Home Planning Hall.

**Social Work Exhibits Committee**  
Demonstration area including scout and campfire group—Social Science.

**Society for the Prevention of Asphyxical Death, Inc.**  
Methods of resuscitation—Hall of Science.

**Spencer Glare Shade Co.**  
Display of automobile accessory—Travel & Transport Bldg.

**Spencerian School of Commerce Accounts & Finance**  
An account and finance exhibit, and a showing of various phases in the development of writing—Hall of Social Science.

**Squibb, E. R., & Sons**  
Medieval pharmacy exhibit—Hall of Science.

**Standard Automatic Signal Corp.**  
Electric signal for railroad crossings—Travel & Transport Bldg.

**Standard Brands, Inc.**  
Products manufactured and displayed by applicant—Agricultural and Hall of Science.

**Standard Gas Equipment Co.**  
A display of the gas range in "General House, Inc." in the Home Planning & Industrial Arts Group.

**Standard Oil Company (Indiana)**  
A Red Crown, weighing 28 tons, under the dome in the Travel and Transport Bldg., with four motion picture machines throwing upon 30-foot walls, the romantic and the practical side of the petroleum industry—Dome of T. & T.

**Stayform Company**  
Display of corsets and brassieres—General Exhibit Bldg., Pavilion 4.

**Stewart & Ashby Coffee Company**  
Grinding and packaging tea and coffee—Agricultural Bldg.

**Stewart Warner Corp.**  
A large display on the balcony in the Radio and Communications Bldg., showing radio, automobile accessories, refrigerators and movie outfit—Electrical Bldg.

**Stover Mfg. & Engine Co.**  
Agricultural machinery — Agricultural Bldg.

**Stransteel House**  
Model house—Special Bldg.

**Straub, W. F., Laboratories**  
Honey exhibit—Agricultural Bldg.

**Studebaker Corp.**  
A display of automobiles and trucks and exhibits to show the development of the automobile industry—Travel and Transport Bldg.

**Surface Combustion Corp.**  
An exhibit of gas fired, air warmer and air conditioning furnaces—Home Planning Hall.

— T —

**Taylor Instrument Company**  
A display of scientific instruments—Hall of Science.

**Texas Company, The**  
A display showing the production of oil and stressing the distribution all over the United States—Travel and Transport Building.

**Thorsch, Marjorie**  
The interior decoration in the "Masonic House" in the Home Planning and Industrial Arts area.

**Time, Inc.**  
Reading room for visitors with all important magazines available — Special Building.

**Timken-Detroit Axle Company**  
An exhibit of axles for passenger cars, motor trucks, and street cars and worm reduction and bevel gears, and four wheel units for six wheel trucks—Travel and Transport Building.

**Timken Roller Bearing Company**  
An exhibit of roller bearings for automotive vehicles, railroad cars, locomotives and industrial machinery—Travel and Transport Building.

**Timken Silent Automatic Company**  
Oil burner unit—Home Planning Hall.

**Travelaide, Inc.**  
Lounge and information booth—Travel and Transport Building.

**Triner Scale Manufacturing Company**  
An exhibit of scale and weigh devices—General Exhibits Group, Pavilion 3.

— U —

**Underwood-Elliott-Fisher Company**  
An exhibit in two sections, one of which is an illusion show that depicts the evolution of office products during the last century, and the other a general exhibit of typewriter, adding machines, and office supplies — General Exhibits Group, Pavilion 3.

**Union Carbide and Carbon Corp.**  
General exhibits of chemical products—Hall of Science.

**Union Switch and Signal Company**  
Exhibit of railway equipment and supplies—Travel and Transport Building.

**United Aircraft and Transport Corp.**  
An exhibit of Air Transport—Travel and Transport Building.

**United States Building & Loan League**  
Scientific presentation on home finance—Home Planning Hall.

**United States Playing Card Company**  
An exhibit of playing cards and the history of the development of card playing—Hall of Science.

**United States Plywood**  
An exhibit of flexwood, plywood and laminated products—General Exhibits Group, Pavilion 3.

**University of Chicago (Division of Biological Sciences)**  
An exhibit showing methods for the rehabilitation and return to society of crippled children, as demonstrated by the Home for Destitute Crippled Children—Hall of Science.

**University of Illinois**  
An exhibit in the medical section dealing with hay fever, tuberculosis, pneumonia, focal infections, rabies, and bleeders' diseases—Hall of Science.

**University of Wisconsin Medical School**  
An exhibit cooperative with the story of medicine in the medical section—Hall of Science.

**Urbana Laboratories**  
Materials for testing plants and soil to determine soil fertility — Agricultural Building.

— V —

**Vandersteen, J.**  
Pewter, pottery, pictures in tile, wood and canvas—Dutch Silver—General Exhibits Group, Pavilion 3.

**Victor Chemical Works**  
An exhibit of heavy chemicals and products and a model of a Nashville phosphoric acid plant—Hall of Science.

**Visible Records Equipment Company**  
A display of office and recording equipment—General Exhibits Group, Pavilion 3.

**Vitamin Food Company**  
An exhibit of vegex, yeast extract, brewers' yeast, chocolate syrup and concentrates—Hall of Science.

— W —

**Wahl Company, The**  
A display of Eversharp pens, mechanical pencils, lead and ink, also featuring a demonstration of new adjustable pen points, a pen with nine points in one—General Exhibits Group, Pavilion 4.

**Walker Dishwasher Corp.**  
An exhibit of a dishwasher in the "Modern Home" in the Home and Industrial Arts area.

**Walker Vehicle Company**  
An exhibit of electric street trucks and tractors—Travel and Transport Building.

**Waterman, L. E., Company**  
A display showing the various steps in the manufacture of fountain pens, and an exhibit of wax hands of famous people molded from life emphasizing the company's slogan of "A Pen to Fit Every Hand"—General Exhibits Group, Pavilion 3.

**Waters-Genter Company**  
A display of electric toasters—Home Planning Hall.

**Weszyne Pump Company**  
An exhibit of oil and gasoline pumps—Travel and Transport Building.

**Waukesha Motor Company**  
An exhibit of internal combustion engines for automotive, industrial and agricultural purposes. A feature is a 350 H. P. gas engine—Travel and Transport Building.

**Weil-McLain Company**  
An exhibit of heating and plumbing installations—Home Planning Hall.

**Weiss, Ira**  
An exhibit of costume jewelry—General Exhibits Group, Pavilion 4.

**Welch, W. M., Manufacturing Company**  
Display of scientific equipment—Hall of Science.

**Wellcome Research Foundation**  
A scientific and historical exhibit of British medicine and surgery—Hall of Science.

**Wells Miller, Roy Petterson**  
An exhibit of nuts, preparation of nuts and nut confections—Agricultural Building.

**West Disinfecting Company**  
An exhibit of disinfecting and germ killing preparations—Hall of Science.

**West Manufacturing Company, Inc., P. C.**  
An exhibit showing can opening machine and assembly—Agricultural Building.

**Western Clock Company**  
A display of clocks and other time keeping devices—General Exhibits Group, Pavilion 4.

**Western Union Telegraph Company**  
A large exhibit showing various developments of communication in the Radio and Communications Building.

**Westinghouse Air Brake Company**  
An exhibit of airbrake operating devices from 1869 to modern designs for freight cars—Travel and Transport Building.

**Westinghouse Electric & Manufacturing Co.**  
Sharing with the General Electric Company a large section of the Electrical Building with a wide range of dynamic exhibits showing the development of electricity. Electrical — Home Planning Hall.

**White, S. S., Dental Manufacturing Company**  
An exhibit of dental products—Hall of Science.

**Whiting Corporation**  
Cooperating with Nash Motors in the illuminated glass parking tower in the outdoor Travel and Transport area.

**Wolfgang Hoffman, Inc.**  
The interior decorations and furnishings of the "Chicago Lumber House" in the Home and Industrial Arts area.

**Women's Architectural Club**  
Decoration and furnishing of lounge room—General Exhibits Group, Pavilion 1.

— Y —

**Yardley & Co. Ltd.**  
A display of imported perfumery, fine soaps and toilet articles—General Exhibits Building, Pavilion 4.

**York Safe & Lock Company**  
An exhibit of various locks and vaults of years ago, still doing service, together with modern bank vaults, safe deposits and various kinds of safes—General Exhibits Building, Pavilion 3.



## HOME AND INDUSTRIAL ARTS GROUP

**HOUSE:** American Rolling Mill Co.  
and Ferro Enamel Corporation

**DECORATOR:** Kroehler Mfg. Co.  
Co-operating: Dietrich Steel Cabinet  
Corp.; Crane Co.; Insulated Steel, Inc.;  
Kroehler Mfg. Co.; Surface Combustion  
Co.; Overhead Door Corp.; West-  
inghouse Elec. & Mfg. Co.

**HOUSE:** Century Homes, Inc.

**DECORATOR:** Century Homes, Inc.  
Co-operating: Holland Furnace Co.; Gen-  
eral Electric Co.; Delta Mfg. Co.;  
Overhead Door Corp.; Crane Co.

**HOUSE:** Common Brick Manufactur-  
ers' Association

Co-operating: Sorvel, Inc.; Edison Gen-  
eral Elec. Appliance Co.; Timken Silent  
Automatic Co.; Ilg Electric Ventilating  
Co.; Elgin Stove & Oven Co.

**HOUSE:** Florida, The State of.

**DECORATOR:** Eastman-Kuhne Gal-  
leries, James S. Kuhne.

Co-operating: Mueller Furniture Co.;  
John Widdecomb Co.; McKay Co.;  
Collins & Aikman; Walker Dishwasher  
Corp.; Edison General Elec. Appl. Co.;  
Frigidaire Corp.; Singer Mfg. Co.;  
Overhead Door Corp.; American Stove  
Co.; Scherwintzer & Graeff; Capehart  
Corp.

**HOUSE:** General Houses, Inc.

**DECORATOR:** Kroehler Furniture Co.  
Co-operating: American Gas Products  
Co.; General Electric Co.; Standard  
Gas Equipment Co.; Kroehler Mfg.  
Co.; Curtis Companies; Inland Steel  
Co.; Container Corp. of America;  
Standard Sanitary Mfg. Co.

**HOUSE:** Masonite Corporation

**DECORATOR:** Marjorie Thorsch  
Co-operating: Bryant Heater & Mfg. Co.;  
Marjorie Thorsch; Electrolux; Amer-  
ican Stove Co.; Overhead Door Co.;  
Kohler Co.; Ilg Electric Ventilating  
Co.

**HOUSE:** Moore, J. C. B.

**DECORATOR:** Gilbert Rohde.

Co-operating: Gilbert Rohde; Heywood  
Wakefield; Herman Miller Furniture  
Co.; the Lloyd Mfg. Co.; Holland Fur-  
nace Co.; Norge Corporation; American  
Stove Co.; Crane Co.; Overhead Door  
Corp.; Kitchen Maid Corp.

**HOUSE:** National Lumber Manufac-  
turers' Association

**DECORATOR:** Wolfgang Hoffmann,  
Inc.

Co-operating: Wolfgang Hoffmann, Inc.;  
American Batesville Cabinet Co.; S. J.  
Campbell Co.; Conover Co.; Copeland  
Products Co.; Charlotte Furniture Co.;  
Hastings Table Co.; Orinka Mills;  
Warren McArthur Furniture Co., Ltd.;  
West Michigan Furniture Co.; Crane  
Co.; Holland Furnace Co.; American  
Stove Co.; S. C. Johnson & Son Co.;  
Southern Cypress; Formica Insulation.

**HOUSE:** Rostone, Inc., and Indiana  
Bridge Co.

**DECORATOR:** Thomas E. Smith

Co-operating: Hoosier Mfg. Co.; Gen-  
eral Electric Kitchen Institute; Holland  
Furniture Co.; Smith-Graham Co.;  
Overhead Door Corp.; Crane Co.

**HOUSE:** Sloane, W. & J., Inc.

**DECORATOR:** Sloane, W. & J., Inc.

Co-operating: Alexander Smith & Sons;  
McCutcheon & Co.; Gorham-Spaulding;  
Cheney Bros.; United Wallpaper Co.;  
De Voe Reynolds Co.

**HOUSE:** Strand, Carl A.

**DECORATOR:** Good Housekeeping

Co-operating: Hoover Co.; Singer Mfg.  
Co.; Crane Co.; Good Housekeeping;  
Baker Furniture Co.; Walker Dish-  
washer Corp.; Fox Furnace Co.; Kelvi-  
nator Corp.; American Stove Co.; Chi-  
cago Flexible Shaft Co.; Altorf Bros.  
Co.; Overhead Door Corp.; Dieterich  
Steel Cabinet; Formica Insulation Co.

### LANDSCAPING

James W. Owen Nurseries  
Muellermist of Illinois  
Owens-Illinois Glass Co.

## HOLDERS OF CONCESSIONS

— A —

**Air Show, Chicago**

Exhibit of airplanes and supplies in  
Travel and Transport.

**Allied Coin Machine Exhibit**

Booth for display and sale of vending  
machines—Hall of Progress.

**American Badge Company**

Store in Hall of Science for manufacture  
and sale of souvenirs and novelties.

**American Engineering & Management  
Corp., Chicago**

Restaurant facing Leif Erickson drive  
south of airport.

**American Flyer, Chicago**

Toy trains shop on Enchanted Island.

**Andis Products Company, Racine, Wis.**

Demonstrate, display, and sell electric  
utility items.

**Arouani and Hakim**

Store for sale of Egyptian tapestries,  
rugs, embroideries, brass and woodwork  
and Ambar cigarettes—Twenty-third  
Street bridge.

— B —

**Barnard, W. G.**

Demonstration of knives, mincers, and  
noodle cutters manufactured by Acme  
Metal Goods Co.; five locations.

**Battle of Gettysburg, Inc., The**

"Battle of Gettysburg" Show—Midway.

**Bausch & Lomb Optical Co., Rochester,  
N. Y.**

Coin-operated telescopes in 12 locations  
on Skyride towers.

**Belgique Pittoresque, Inc., Chicago**

Belgian Village, south of Twenty-third  
Street entrance, with town hall, church,  
theater, houses, etc.

**Bennett, Horace C.**

Booth for display and sale of Louise  
Cary's Jams—Hall of Progress.

**Benjamin, Jack, Chicago**

Indian Arrow game; Aeroplane Ball  
game, American Tally Ball game, on  
Midway.

**Beuttas, Joseph H.**

Manufacture and wholesale distribution  
of "Official Medal."

**Bierdemann, Richard A.**

Show called "The Great Beyond."

**Black-Partridge Pageants, Inc., Chicago**

Pageant, "The Fort Dearborn Massacre"  
and sale of booklets and post cards de-  
picting Fort Dearborn massacre.

**Blanchard, Ray, Evanston, Ill.**

Children's Tour service conducted from  
Enchanted Island.

Bonded Checking Stands, Inc.  
15 checking stands and rental and sale of umbrellas.

Bridge World, Inc.  
Bridge Center. Booth in Hall of Science in which the game of bridge is taught and played in tournament.

Brooks Contracting Corp.  
Washroom facilities.

Brown, E. W., and Mackintosh, J. A.  
Display and demonstration of Florida sponge industry.

Bryant and Breuner, Berkeley, Calif.  
Stands for sale of "Shasta Snow."

Burt, J. W.  
Sale of bridge game books and accessories.

Byrd, Admiral Richard E., Boston, Mass.  
Exhibition of the "City of New York," Admiral Byrd's south pole ship. West shore of South lagoon.

— C —

Cardett, Inc., Chicago  
Store and stands for sale of "World's Fair" souvenir emblems.

Carlson Amusement Enterprise, Chicago  
Exhibit and sale of statue of American Girl. Show on Midway.

Carter, Arch O. & Fred F., Chicago  
Soda grill and luncheonette in Travel and Transport building.

Carter, Chas. J.  
Magic Show—Midway.

Century Beach, Inc.  
Bathing beach—Northerly island.

Century News Co., Inc., Chicago  
Operation of seventy souvenir and candy stands throughout grounds.

Century Pastimes and Games, Inc.  
Game of skill called "Shufflette"—Midway.

Century Productions, Inc., Chicago  
Wild West show and Rodeo in Soldier Field Aug. 25 to Sept. 10.

Century Razor Blade Co., Chicago  
Operation of stand for sale of razors and razor blades.

Chicago Concessions, Inc., Chicago  
Operating forty carbonated drink stands throughout grounds.

Chicago Daily News, Inc., The  
A Service Bureau—Hall of Science.

Chris Craft Water Transit, Inc.  
Speed Boat Thrill rides.

Citrus Fruit Juice, Inc., Chicago  
Operating sixty stands for sale of citrus drinks.

College Inn Management, Inc., Chicago  
Pabst Blue Ribbon Casino restaurant and outdoor garden on Northerly island north of Twenty-third Street entrance.

Columbian Transportation Co., Chicago  
Operation of boats within fair grounds.

Columbian Transportation Co., Chicago  
Operation of steamers and 4 motor boats outside lagoons.

Comoy, H., & Co., London  
Operation of store in Hall of Science for sale of smokers' articles, tobacco and imported cigarettes.

Congress Construction Co., Chicago  
Rutledge Tavern—Operation of replica of tavern for sale of meals—located in Lincoln group.

Continental Concession Co., Chicago  
Lincoln Group—Replicas of various buildings prominent in life of Lincoln.

Crown Food Co., Chicago  
Operation of six lunchrooms throughout grounds.

Cyclone Amusements, Inc., Chicago  
Operation of Cyclone Amusement Ride on the Midway.

— D —

Daggett Roller Chair Co.  
Roller chair and jinrickisha.

Daley, Raymond T., Chicago  
Mickey Mouse circus—on Midway.  
Miniature circus of antics of Mickey Mouse.

Dance Ship, Inc., Chicago  
Dance Ship and two soda fountains for sale of food and drinks.

Days of '49, Inc., Chicago  
Reproduction of 1849 mining camp; replicas of camp with two streets and nearly two-score buildings.

D-C Manufacturing Co.  
Booth for display and sale of scouring brushes—Hall of Progress.

Deisenhofer, Victor & Mauritius Gruber  
Victor Vienna Restaurant—Home Planning group.

Diamond Bright Corp., Chicago  
Booth for display and sale of "Luster-Sac," metal polish and cleaner in Hall of Progress.

Dixon, Alice Noble  
Store for sale of dolls—Enchanted Island.

Donnelley, R. R., & Sons Company  
Publication and wholesale distribution of Official View Books, Official Mailing Folders, Official Postcards, and art photographs.

Doughnut Machine Corp.  
10 doughnut stands and a doughnut shop.

Drury, John, & The Cuneo Press, Inc.  
To write "An Authorized Guide to Chicago."

Dufour, A. M., Chicago  
Embryological and Prehistoric show on Midway.

Dufour, Lew  
Freak show—Midway.

Duke Mills Amusements Corp., Chicago  
Freak show on Midway; also Plantation Negro show on Midway.

Dunbar-Gibson, Inc.  
Booth for display and sale of curtain stretchers, safety razor blade sharpener, garden ornament—Hall of Progress.

— E —

Edwards, E. W., Chicago  
Adobe sandwich and barbecue shop in Midway.

Eitel, Inc., Chicago  
Operation of Old Heidelberg Inn; also Eitel Rotisserie east of Twelfth Street entrance.

Evening American Publishing Co., Chicago  
Golf tournament, consisting of driving, approaching and putting in Soldier Field, Sunday, June 4th.

Exposition Fruit Co., Chicago  
Fifteen fruit and nut stands throughout grounds; also food shop at Twenty-third Street bridge.

— F —

Fagaol, R. B., Chicago  
Miniature railroad operating in Enchanted Island.

Falk and Kalman  
Store for display and sale of "The Pathfinder," a weekly newspaper—Twenty-third Street bridge.

Feldman, M. Newt  
Sandwich stand.

Fisher, C. R., Chicago

Operation of kosher restaurant on Midway; also Temple of Phrenology, games known as "Japanese Tally Ball," "American Baseball Dart," and "Aeroplane Ball game."

Florida & Canada Amusements Corporation

Seminole Indian village and alligator wrestling show—Midway.

Flying Turns Operating Co., Inc., Chicago

Operating "Flying Turns," thrill ride on Midway.

Frozen Custard, Chicago

Operating stands for sale of "frozen custard," ice cream-like product.

#### — G —

Gaw, George D., Chicago

Penny weight scales throughout grounds.

General Cigar Company, Chicago

Cigar store in Twenty-third Street concourse.

Glutting, Roy H.

Sale of kites, marble shooter, and walking duck on Enchanted island.

Goldberg, Murray

5 "Guess-ur-weight" scales throughout grounds.

Golden City Scooter, Inc., Philadelphia

Amusement ride known as "Scooter" on Midway.

Goodyear Tire and Rubber Co., Akron

Operating helium-filled, twin motored dirigibles with capacity of from 4 to 13 persons from airdrome south of Travel and Transport building.

Gordon, Clifford J., Chicago

Operating "Movie-of-U" photographic machines in two stores on Twenty-third Street bridge.

Gordon & Rosenblum, Chicago

Operating 6 taffy and cotton candy stands in grounds.

Gray Line Sightseeing Co., Chicago

"Official Tour Service," including special private tour service in grounds.

Green Duck Metal Stamping Co., Chicago

Store in Hall of Science for sale of souvenir metal novelties and tableware.

Greyhound Corporation, The

Intra-Fair bus transportation.

Groak Water Concession, 1933

Furnishing of drinking water.

Gros, Jean, Pittsburgh, Pa.

Marionette show on Enchanted Island.

Gruen, Paul R., Inc., Chicago

Store for sale of watches, novelty jewelry, etc., at Twenty-third Street bridge.

#### — H —

Heckler, Prof. Wm.

Trained Flea circus—Midway.

Heller & Sons

Booth to display and sell: monograms and ink, darnings—Hall of Progress.

Hock, Edward A., Chicago

Operating games on Midway known as follows: "Walking Charley Ball Throwing," "Kentucky Derby," "Fish Pond," "Hoop-la," "Rollaball Alley," "Skill Toss," and "Target Skillo."

Holmes, Burton, Lectures, Inc., Chicago

Motion picture studio for making of pictures for commercial concerns and exhibitors—Hollywood.

Holton & Johns, Chicago

Operating "Progress of Domestic Animals," showing evolution of horses, cattle, hogs, sheep and dogs. Leif Eriksen drive.

Hood, J. V., Racine, Wis.

Children's novelties—Hall of Progress.

Horticultural Exhibitions, Inc.

Horticultural show and restaurant—South end Northerly island.

Hub, Henry C. Lytton & Sons, The

Store for sale of wearing apparel, accessories and sporting goods—Twenty-third Street concourse.

Hull and Kerr

Booth for display and sale of vegetable garnishing sets—Hall of Progress.

#### — I —

Icely, Lawrence B., Chicago

Aquatic Golf course on shore line of Northerly island.

Infant Incubator Co., Chicago

Operating infant incubator room, nursery, and exhibit room. Twenty-third Street plaza.

International Bazaars, Inc.

Oriental village—Midway.

International Oddities, Inc.

Ripley "Believe It or Not" Show—Midway.

Israelite House of David, Benton Harbor, Mich.

Store for sale of House of David articles at Twenty-third Street bridge.

#### — J —

Jonkers, John and Winifred, Chicago

Operating stands for sale of French waffles, cakes, pastries, and dairy drinks, on Midway.

#### — K —

Kaufmann & Fabry Co., Chicago

Operating photographic studio for taking and selling "Official" photographs of fair; also operating store for sale of cameras and supplies in Hall of Science.

Klauber Novelty Co., Chicago

Operating game of skill called "Bridge Keno" on Midway.

Klawans, S. E., Chicago

Operating sandwich stand on Midway.

Kule-Fut Laboratories

Booth for display and sale of dusting powder for feet—Hall of Progress.

#### — L —

Leonard, L. S., Chicago

Booth to display and sell a combination tooth brush, gum massager, desk pad, and bird house in Hall of Progress.

Levan, D., Chicago

Sandwich stand on Midway.

Libby, McNeill & Libby, Chicago

Operating 20 stands for sale of potato products, tomato juice and tomato juice cocktails, and 10 pineapple juice stands.

Library of International Relations, Chicago

Children's library and reading room—Enchanted Island.

Lightner Publishing Corp.

Store for sale of relics from Columbian Exposition, and magazines—Twenty-third Street bridge.

Lintz, G. A., Brooklyn, N. Y.

Operating amusement known as "Gorilla Villa" in which are displayed 2 gorillas and 10 chimpanzees. Midway.

Lorenz & Stark, Amsterdam

"Try-your-Weight" scales in five locations on grounds.

Loveland, T. A.

Root beer stands.

Lunenburg Exhibitors, Ltd.

Champion fishing schooner "Bluenose."

Lytton, Henry C. & Co., Chicago

Operating store for sale of wearing apparel and sports goods—Twenty-third Street bridge.

### — M —

Manxi & Kottas, Chicago

Operating soda grill and luncheonette in Agricultural building.

Mar-Ney Products Co.

Booth for display and sale of a machine for mounting pictures on mirrors—Hall of Progress.

Marvin, Campbell

Sale of Holmes Bakery Products from stand.

Master Marble Co., Clarksburg, W. Va.

"Master Marble Shop," for sale of marbles—Enchanted Island.

Maynes-Illions Novelty Rides, Inc.

5 amusement rides—on Midway.

Meldon, Maurice, Cleveland, O.

Booth for demonstration, display and sale of auto polish—Hall of Progress.

Merryway Company, The

Booth for display and sale of an electric food preparer—Hall of Progress.

Messmore & Damon, Inc.

Prehistoric Animal show—Twenty-third street.

Meyers, Joseph

Booth for sale and display of hand written engraving on key checks and other small articles, fountain pen sets—Hall of Progress.

Midget Village, Inc., Chicago

Village operated by fifty midgets on Midway.

Midway Recreation Corp., Beaver Falls, Pa.

Operating "Laff-In-The-Dark" amusement ride and "Fascination," a game of skill—Midway.

Miller and Gaus, Chicago

"African Dip," an amusement—Midway.

Milne, Lorne A., Chicago

"Handwriting Character Analysis," booth on Midway.

Morgan, Leon

Counter in "The World a Million Years Ago" for the sale of a book or pamphlet on pre-historic animals and miniature reproductions of pre-historic animals.

Morgan, Lucy, Penland, N. C.

Operating log cabin for sale of handicraft of Carolina mountaineers—adjoining Fort Dearborn.

Muller, Charles J., Monrovia, Calif., and Chicago

Soda fountain and luncheonette and Muller's Pabst Cafe on mainland and Schlitz Garden Cafe west of States group.

McDowell, L. V.

Booth for display and sale of rubber stamps—Hall of Progress.

### — N —

Noon, J. Gilbert, Chicago

Shooting gallery—Midway.

Nu-Dell Manufacturing Co.

Two booths for display and sale of cake decorator, household mending cement, carpet cleaner and hair wavers—Hall of Progress.

### — O —

Oakville-American Pin Division, Scovell Mfg. Co.

Booth for display and sale of Take-a-Pin "Pin Dispenser"—Hall of Progress.

O'Brien & Payne, Chicago

Demonstration, display, and sale of a boiler oven—Hall of Progress.

Owen Bros., London, England

Store for sale of jewelry and pictures decorated with butterfly wings—Twenty-third Street bridge.

### — P —

Pal-Waukee Airport, Inc., Chicago

Amphibian planes for transportation and thrillrides.

Panorama, Inc., Chicago

Exhibiting panorama painting "Pantheon de la Guerre"—Midway.

Paris, Inc., Chicago

Operating reproduction of "Streets of Paris"—South of Twenty-third street and west of lagoon.

Paschal, H. F., Chicago

Operating store for sale of historical toys—Twenty-third Street bridge.

Paulus, S. E., Chicago

Animal act on Enchanted Island.

Paulus, S. E., Chicago

Presentation of animal acts—Theatre, Enchanted Island.

Pfund-Bell Nursery Co., Elmhurst

Show room for display of palms, ferns, evergreens, etc.

Polish Pavilion, Inc.

Special building for restaurant, dancing pavilion, theatre, booths and display spaces for articles imported from Poland—Northerly island.

Pop Corn Concessions, Inc., Chicago

Operating forty stands for sale of popcorn throughout ground.

Potstada, George

Booth for sale and display of hair dryer and folding lamp—Hall of Progress.

Price Mfg. Co., Chicago

Operating store for sale of patent clothes line—Twenty-third Street bridge.

Primer Publications, Chicago

To publish for sale educational booklets for children.

Progress Amusement Corp., Chicago

Lagoon transportation and sight-seeing boat—Lagoons.

### — R —

Radio Steel & Manufacturing Co., Chicago

Exhibit and sell toy coaster wagons—Enchanted Island.

Raemer, Norman

Booth for display and sale of an aerial eliminator—Hall of Progress.

Republic Chemical Co.

Booth for display and sale of deodorants, foot lotions, cosmetics.

Richards, W. S.

Booth for display and sale of maple syrup and maple cream—Hall of Progress.

Robertson-Davis Co., Inc.

Booth for display and sale of Automatic Solder.

Rogers, Max D., Chicago

Operating games known as "Rose Bowling" and "International Base Ball Pitching"—Midway.

Rosenthal & Levy, Chicago

Sandwich stand.

Rosenthal, Oscar W., Chicago

"Hollywood" — sound-recording-photographic studio—South end of Northerly island.



**Ruel & Stewart, Chicago**

Operating motor boats from outside grounds to Thirty-first Street landing.

**Russell, Harry, Chicago**

Operating games known as "Devil's Bowling Alley" and "Target Skill"—Midway.

— S —

**Sanitary Foot Rest Co.**

Booth for display and sale of foot rests for furniture, stoves, and radios—Hall of Progress.

**Sapp, Phillip A., Eufaula, Ala.**

Miniature park for children—Enchanted Island.

**Sbarbaro, John A., Chicago**

Operating game known as "Hollywood Dart"—Midway.

**Schack, M., Chicago**

Exhibition of marine life—Midway.

**Schumacher, B. P.**

Exhibit of painting "The Crucifixion"—Midway.

**Schwartz, David S., Chicago**

Toy Shop—Enchanted Island.

**Scranton Lace Co.**

Store for sale of lace manufactured by concessionaire — Twenty-third Street bridge.

**Semek, Joseph**

Booth for sale and display of hand embroidery—Hall of Progress.

**Shine-Sac Inc., Chicago**

Stand to demonstrate Shine-sac products—Twenty-third Street bridge.

**Show Boat Amusement Corp., Milwaukee, Wis.**

Operating floating theatre known as "Show Boat"—West shore of South lagoon.

**Showmen's League of America, Chicago**

Operating game known as "Air Gun Novelty"—Midway.

**Siegel, R. J., Chicago**

"Pony ride and miniature zoo"—Enchanted Island.

**Simon, Leo, Chicago**

"S-49 Submarine": an ex-navy submarine—North lagoon.

**Simpson Flower Shop**

Flower shop—Twenty-third Street bridge.

**Singer, Edward, Chicago**

Operating store for sale of men's neckwear—Twelfth street entrance; also store for sale of portable radio and radio accessories—Area north of India.

**Smith, Henry Justin**

Writing of a History of Chicago.

**Spencer, Harvey P.**

Store for manufacturing, display and sale of taffy and taffy candy—Twenty-third Street Bridge.

**Spencer, W. L.**

Stand for sale of an automobile glare shade.

**Spies Brothers, Chicago**

Shop for sale of fraternity and class jewelry—23d street bridge.

**Standard Manufacturing Co., Cambridge City, Ind.**

Supply of chairs and benches.

**Stearns, Walter**

Store for display and manufacture of profiles etched in silver or bronze—Twenty-third Street Bridge.

**Stockholm, Carl**

Dry cleaning, pressing and laundry service—General Exhibits Group.

**Stone and Coleman**

Booth for display and sale of flexible belts and buckles—Hall of Progress.

**Sullivan, Mrs. W. G.**

Booth for display and sale of costume jewelry to be made on booth—Hall of Progress.

**Swedish Produce Co., The**

Lunchroom and exhibit of Swedish products—Agricultural building.

— T —

**Thomson, S. W.**

Lion Motordrome—Midway.

**Thorach and Rose**

Booth for display and sale of Metallic-X adhesive compound and wood block miniature buildings—Hall of Progress.

**Thorud, Hazel M., Hubbard Woods**

Operating restaurant known as "High Life Fish Bar"—Northerly island.

**Tokyo Chop Suey Co.**

Chinese Lunch Room—Twenty-third Street bridge.

**Tony Sarg Co., New York**

Marionette show—Theatre on Enchanted Island.

**Tolpin Studios**

Booth for display and sale of: Gold China Ware—Hall of Progress.

**Tuma, Frank J., and Company**

Booth for sale and display of baskets, beads, wood trays—Hall of Progress.

— U —

**Ukrainian World's Fair Exhibit, Inc.**

Exhibit of Ukrainian pottery, paintings, embroidery, etc.—Thirty-ninth Street entrance.

**Ultrasound, Inc., Chicago**

Operating motion picture auditorium at south end of Northerly island.

**U. S. Crayon Co., Chicago**

Crayon shop—Enchanted Island.

— V —

**Van Briggel Art Pottery**

Store for display and sale of Cedar Craft and pottery—Twenty-third Street bridge.

**Vulich, Jack, Chicago**

Booth for display and sale of razor blades and razors—Hall of Progress.

— W —

**Walgreen Company**

Largest drugstore in the world.

**Walters, R. J., Manchester, Md.**

Operating observation balloon.

**Waterhouse, W. L., Chicago**

Sandwich stand—bridge adjoining General Exhibits building.

**Weiss, Ira**

Booth for display and sale of fountain pens and pencils—Hall of Progress.

**Weiss, Manfred**

Place in Foreign bazaar for sale of preserves and canned goods.

**Wilson, Clif., Tampa, Fla.**

"Snake Show"—Midway.

**Woodlawn Service Co.**

Sale of programs, popcorn, peanuts, tobacco, wrapped ice-cream, and confectionery—Soldier Field.

**World's Fair Ice Cream Products Co.**

Stands for sale of ice cream and ice cream specialties.

**World's Fair Ice Cream Products Co., Chicago**

Twenty-one stands for sale of ice cream throughout grounds.

— Z —

**Zienger, Emanuel E., Chicago**

Sale of mechanical toys, ties and handkerchiefs—Hall of Progress.

## CONTRIBUTORS TO HISTORICAL EXHIBITS IN FORT DEARBORN

American Legion	Du Pont de Nemours, E. I. & Co., Inc.	Simmons, Vesta R.
Antique Arms Exchange	Ford, H. D.	Smithsonian Institution
Bitting, A. W.	Fur Merchants Exchange	Streichert, E. J., Mfg. Co.
Copps, Florence C.	Ho Ho Shop	U. S. Military Academy
Daughters of American Revolution	Manson, John	Van Deventer, Christo- pher
Daughters of 1812	McGrew, Martha	War Department— Rock Island Arsenal
	Sonce, Harvey J.	
	Shubert, A. B., Inc.	

## SCIENTIFIC EXHIBITS IN HALL OF SCIENCE

The following scientific industrial institutions, and organizations, are either furnishing exhibits or cooperating in their preparation in basic science and medicine:

Aluminum Company of America	Denver Equipment Co.	McGill University
Baker & Co.	Dow Chemical Co.	Merck & Co.
Baker, J. T.	Durirron Co.	Metal & Thermit Co.
Bausch & Lomb Optical Co.	Fansteel Products Co.	Milwaukee County Hos- pital
Beebe, William	Firestone Tire & Rubber Co.	Milwaukee Public Mu- seum
Belgian National Founda- tion for Scientific Re- search	General Biological Supply House	Museum of Science and Industry
Boyce - Thompson Insti- tute	G. M. Laboratories, Inc.	National Academy
Buffalo Museum of Sci- ence	Goldsmith Brothers, Smelting & Refining Co.	New Jersey Zinc Co.
Bureau of Standards	Grunow Co.	Pasteur Institute of Paris
Callite Products Co.	Heresy, Dr. Don	Perser Corporation, The
Chicago Centennial Den- tal Congress	Illinois State Department of Health	Purdue University, Agricultural Research Station
Clay-Adams Co.	International Filter Com- pany	Rand McNally Co.
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Cornell University	Johnson, S. C., & Co.	Simoniz Co.
Corning Glass Works	L'Hommedieu, Charles, & Sons	Spencer Lens Co.
Cutler-Hammer Co.	Loyola University	Standard Brands, Inc.
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	Mayo Clinic	Thermal Syndicate, The



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